

SEARCH REQUEST FORM

Scientific and Technical Information Center

BEST AVAILABLE COPY

Requester's Full Name: Christopher Keehan Examiner #: 77269 Date: 2/3/03
Art Unit: 1712 Phone Number 30 5-2778 Serial Number: 10/058423
Mail Box and Bldg/Room Location: CP3 5C14 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Hi. Can you please search these claims?
The recurring unit of claim 3 especially.
Thanks.
Chris

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>EL</u>	NA Sequence (#) _____	STN <u>\$666.09</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>✓ (2)</u>	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic <u>✓ (and)</u>	Link _____
Date Completed: <u>2-4-03</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>5</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>80</u>	Other _____	Other (specify) _____

=> file reg

FILE 'REGISTRY' ENTERED AT 11:00:39 ON 04 FEB 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

=> d his

FILE 'LREGISTRY' ENTERED AT 09:28:33 ON 04 FEB 2003

L1 STR
L2 STR

FILE 'REGISTRY' ENTERED AT 09:40:24 ON 04 FEB 2003

L3 SCR 2043
L4 7 SEA SSS SAM L1 AND L2 AND L3
L5 145 SEA SSS FUL L1 AND L2 AND L3
SAV L5 GIL112/A

FILE 'LCA' ENTERED AT 10:32:54 ON 04 FEB 2003

L6 32136 SEA (PRODUC? OR PROD# OR GENERAT? OR MANUF? OR MFR# OR
CREAT? OR FORM## OR FORMING# OR FORMAT? OR MAKE# OR
MADE# OR MAKING# OR FABRICAT? OR SYNTHESI? OR PREPAR? OR
PREP#)/BI,AB

FILE 'HCA' ENTERED AT 10:37:38 ON 04 FEB 2003

L7 89 SEA L5
L8 652733 SEA PHOTOACID? OR PHOTOGENERA? OR PAG OR P(W)A(W)G OR
PAGS OR L6(2A)ACID# OR PHOTO(2A)(ACID# OR GENERA?)
L9 135876 SEA PHOTORESIST? OR RESIST OR RESISTS OR PHOTOMASK? OR
MASK?
L10 81371 SEA ((PHOTO OR LIGHT OR PHOTOLY?)(2A)(RX# OR RXN# OR
REACT? OR SENSITI? OR POLYM? OR CURE# OR CURING# OR
CURAB? OR CROSSLINK? OR CROSS(W)LINK? OR CAT# OR
CATALY?))/BI,AB
L11 90367 SEA ((ULTRAVIOLET? OR ULTRA(W)VIOLET? OR UV# OR SUV OR
LUV OR RADIA? OR IRRADIA? OR EMANAT? OR EMIT? OR EMISS?
OR LASER?)(2A)(RX# OR RXN# OR REACT? OR REACT? OR POLYM?
OR CURE# OR CURING# OR CURAB? OR CAT# OR CATALY? OR
CROSS(W)LINK? OR CROSSLINK?))/BI,AB
L12 145550 SEA (PHOTORX## OR PHOTOREACT? OR PHOTOSENS? OR PHOTOPOLYM
? OR PHOTOCUR? OR PHOTOHARDEN? OR PHOTOCROSS? OR
PHOTOCAT?)/BI,AB
L13 854583 SEA (MIXT# OR MIXTURE? OR BLEND? OR ADMIX? OR COMMIX? OR
IMMIX? OR INTERMIX? OR COMPOSIT? OR COMPN# OR COMPSN# OR
FORMULAT? OR INTERSPER?)/TI
L14 21 SEA L7 AND (L8 OR L9 OR L10 OR L11 OR L12)
L15 36 SEA L7 AND L13
L16 27 SEA L15 NOT L14
L17 41 SEA L7 NOT (L14 OR L16)

FILE 'REGISTRY' ENTERED AT 11:00:39 ON 04 FEB 2003

=> d l5 que stat
L1 STR

```

  4
  Ak
  }
  }
2 SiXG1
  } 3
  Ak
  5

```

VAR G1=O/X

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 4

CONNECT IS E1 RC AT 5

DEFAULT MLEVEL IS ATOM

GGCAT IS SAT AT 4

GGCAT IS SAT AT 5

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE

L2 STR

```

  11      12
  O        O
  ||       ||
  ||       ||
1 Ak~N=N~Ak
  1      2 3 4

```

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

L3 SCR 2043

L5 145 SEA FILE=REGISTRY SSS FUL L1 AND L2 AND L3

100.0% PROCESSED 433 ITERATIONS

145 ANSWERS

SEARCH TIME: 00.00.01

=> file hca

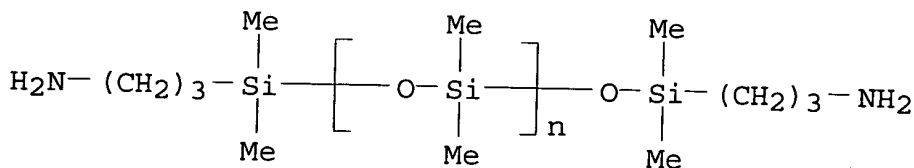
FILE 'HCA' ENTERED AT 11:01:01 ON 04 FEB 2003
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> d l14 1-21 cbib abs hitstr hitind

L14 ANSWER 1 OF 21 HCA COPYRIGHT 2003 ACS
 137:301904 Antireflective films with high transparency, antistatic property, and scratch resistance and high-refractive-index coatings therefor. Shimomura, Hiroomi; Sugiyama, Naoki; Nishikawa, Akira (JSR Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002311208 A2 20021023, 14 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-118656 20010417.
 AB The coatings comprise (A) elec. conductive metal oxide powders (e.g., ATO or ITO) 100, (B) OH-bearing polymers 5-50, (C) .gtoreq.2 (/mol.)-(meth)acryloyl-bearing compds. 5-50, (D) **photopolymn** . initiators 0.1-10, and (E) org. solvents 2000-10,000 parts. Antireflective films having 0.05-0.5-.mu.m-thick high-n layers from the coatings and 0.05-1-.mu.m-thick low-n layers in succession on supports are also claimed.
 IT 158947-07-0, VPS 1001
 (macroinitiators; in prepn. of polysiloxane-blocked fluoropolymers for low-n layers of antireflective films)
 RN 158947-07-0 HCA
 CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] (9CI) (CA INDEX NAME)

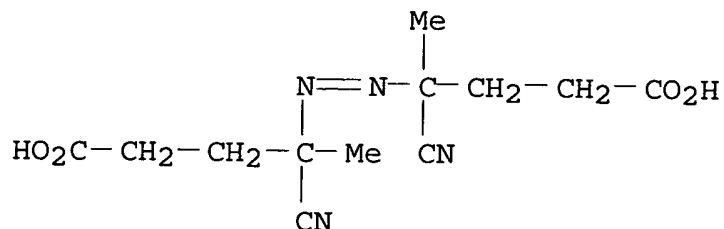
CM 1

CRN 97917-34-5
 CMF (C2 H6 O Si)n C10 H28 N2 O Si2
 CCI PMS



CM 2

CRN 2638-94-0
 CMF C12 H16 N4 O4



- IC ICM G02B001-11
ICS B32B007-02; C08F290-02; G02B001-10; G03F007-11
- CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 42, 74
- ST **photocurable** antireflective coating crosslinked butyral resin; ATO dispersed antistatic antireflective film display; scratch resistant antireflective coating ITO contg
- IT 158947-07-0, VPS 1001
(macroinitiators; in prepn. of polysiloxane-blocked fluoropolymers for low-n layers of antireflective films)
- IT 71868-10-5, 2-Methyl-1-[4-(methylthio)phenyl]-2-morpholino-1-propanone
(**photopolymn.** initiators; antireflective coatings and films therefrom with high transparency and antistatic property)
- L14 ANSWER 2 OF 21 HCA COPYRIGHT 2003 ACS
- 137:171081 Alkali-degradable **photocatalyst** coating compositions and removal of the films by using alkalis. Arimoto, Kunio; Eikawa, Masahiro; Tago, Kazuto; Nishida, Hideo; Shinohara, Kuniaki; Kitazaki, Satoshi (Ishihara Yakuhin Co., Ltd., Japan; Toto Ltd.). Jpn. Kokai Tokkyo Koho JP 2002235028 A2 20020823, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-34702 20010209.
- AB The coating compns. contain **photocatalysts** and copolymers mainly contg. polymerizable unsatd. carboxylic acids, (meth)acrylates, and di-Me polysiloxane derivs. shown as CO(CH₂)_aCR₁R₂N:NCR₁R₂(CH₂)_aCOAR₃SiMe₂(OSiMe₂)_bOSiMe₂R₃A (I; R₁ = H, Me; R₂ = H, CN; R₃ = C1-10 alkylene, C1-10 alkyleneoxy; A = O, :NH; a = 0-6 integer, b = 10-500 integer). The compns. may contain UV absorbers 0-30, antioxidant 0.1-30, and quenchers 0.1-20 parts per 100 parts of the copolymers. When cured layers of the coating compns. become unnecessary, the layers can be removed by reacting with pH .gtoreq.8 alkalis. Thus, an i-PhOH-based coating contained 100 parts (425 mg) of a copolymer with **acid** value 260 **prepd.** by reacting methacrylic acid 4, Me methacrylate 2, and VPS 0501 (I) at ratio 4:2:2, and 18 parts (75 mg) 2,2',4,4'-tetrahydroxybenzophenone. It was sprayed on black acrylic melamine resin plates, top-coated by spraying a PhOH-based dispersion of a 1:1 TiO₂/SiO₂ mixt. and dried to give test pieces showing contact angle to water after irradiating 2 or 20-J UV light 17 and .ltoreq.10.degree., good film removability with alkalis, and giving no harms to the substrates.
- IT 287714-32-3P

(alkali-degradable **photocatalyst** coating compns. and
removal of the films by using alkalis)

RN 287714-32-3 HCA

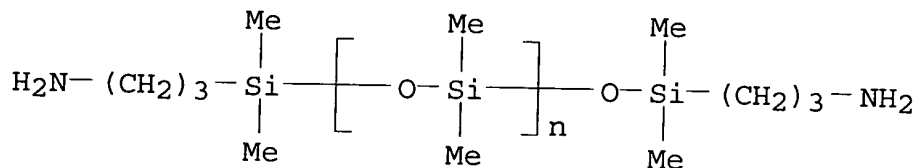
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], methyl
2-methyl-2-propenoate and 2-methyl-2-propenoic acid, block (9CI)
(CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

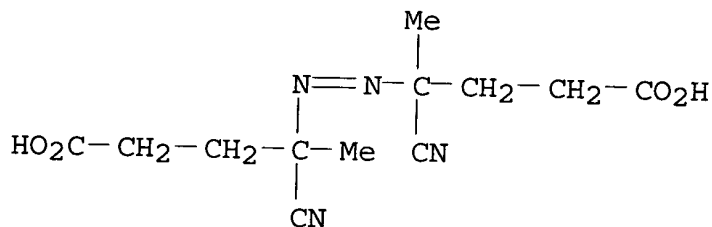
CCI PMS



CM 2

CRN 2638-94-0

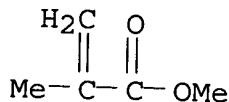
CMF C12 H16 N4 O4



CM 3

CRN 80-62-6

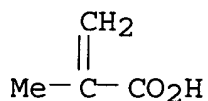
CMF C5 H8 O2



CM 4

CRN 79-41-4

CMF C4 H6 O2



- IC ICM C09D133-02
ICS B01J035-02; C09D005-20; C09D133-06; C09D183-14
- CC 42-7 (Coatings, Inks, and Related Products)
- ST acrylic azo polysiloxane **photocatalyst** coating alkali degradable; titania silica **photocatalyst** coating alkali degradable; hydrophilic coating acrylic azo polysiloxane **photocatalyst**; antisoiling coating acrylic azo polysiloxane **photocatalyst**
- IT Coating removers
Light stabilizers
Photolysis catalysts
(alkali-degradable **photocatalyst** coating compns. and removal of the films by using alkalis)
- IT Coating materials
(antisoiling; alkali-degradable **photocatalyst** coating compns. and removal of the films by using alkalis)
- IT Alkali metal hydroxides
(coating remover; alkali-degradable **photocatalyst** coating compns. and removal of the films by using alkalis)
- IT Coating materials
(hydrophilic coatings; alkali-degradable **photocatalyst** coating compns. and removal of the films by using alkalis)
- IT 131-55-5
(UV absorber; alkali-degradable **photocatalyst** coating compns. and removal of the films by using alkalis)
- IT 13463-67-7, Titania, uses 18282-10-5, Tin oxide (SnO₂)
(alkali-degradable **photocatalyst** coating compns. and removal of the films by using alkalis)
- IT 287714-32-3P
(alkali-degradable **photocatalyst** coating compns. and removal of the films by using alkalis)
- IT 2409-55-4, 2-tert-Butyl-4-methylphenol
(antioxidant; alkali-degradable **photocatalyst** coating compns. and removal of the films by using alkalis)
- IT 13927-77-0, Nickel dibutyldithiocarbamate
(quencher; alkali-degradable **photocatalyst** coating compns. and removal of the films by using alkalis)

L14 ANSWER 3 OF 21 HCA COPYRIGHT 2003 ACS

137:126563 (Acrylic polysiloxane coating composition, cured product, laminate and method for producing the cured product. Shimada, Mibuko; Yoshimura, Nakaatsu; Hashiguchi, Yuichi (JSR Corporation, Japan). Eur. Pat. Appl. EP 1229092 A2 20020807, 27 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR. (English). CODEN:

APP.

EPXXDW. APPLICATION: EP 2002-2262 20020130. PRIORITY: JP
2001-24780 20010131.

AB Title compn. comprises a specific silyl group-contg. polymer, in which the max. size of particles contained therein is 2 .mu.m or less, and the no. of particles having a size of 0.2 .mu.m to 2 .mu.m is 1,000 particles/mL or less. The compn. may further contain a specific compd. or at least one component selected from an organosilane represented by (R1)_nSi(X)_{4-n}, a hydrolyzate of the organosilane and a condensate of the organosilane, wherein wherein, R1 independently represents a C1-C8 monovalent org. group; X represents a halogen atom or an C1-C8 alkoxy or acetoxyl group; and n is 0, 1, or 2. Thus, a film was prepd. by coating a PET film with a compn. comprising hexafluoropropylene-Vinyltrimethoxysilane copolymer prepd. in the presence of VPS 1001N, dimethyldimethoxysilane, 3-glycidoxypropyltrimethoxysilane in the presence of ethylacetoacetate-aluminum-di-isopropylate in isopropanol, MEK, and water. The compn. exhibits excellent in storage stability, high in hardness and excellent in mech. strength such as wear resistance. The coating film shows excellent smoothness and good taking-up properties even when no lubricant is contained.

IT 158947-07-0, VPS 1001

(VPS 1001N, polymn. catalyst; manuf. of acrylic polysiloxane coating compn. for plastic films)

RN 158947-07-0 HCA

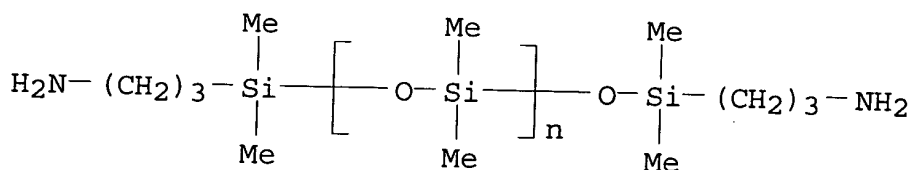
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

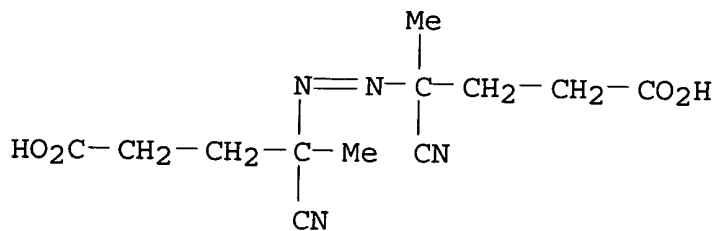
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



- IC ICM C09D157-06
ICS C09D143-04; C09D201-10
- CC 42-10 (Coatings, Inks, and Related Products)
- IT Dehydration reaction
(agents; manuf. of **photo-curable** acrylic polysiloxane coating compn. for laminated plastic films)
- IT Coating materials
(**photocurable**; manuf. of **photo-curable** acrylic polysiloxane coating compn. for plastic films)
- IT 158947-07-0, VPS 1001
(VPS 1001N, polymn. catalyst; manuf. of acrylic polysiloxane coating compn. for plastic films)
- IT 79-10-7DP, Acrylic acid, derivs., reaction
products with caprolactone, polymers with acrylates and siloxanes 80-62-6DP, Methyl methacrylate, polymers with acrylates and siloxanes 101-43-9DP, Cyclohexyl methacrylate, polymers with acrylates and siloxanes 103-11-7DP, 2-Ethylhexyl acrylate, polymers with acrylates and siloxanes 106-91-2DP, Glycidyl methacrylate, polymers with acrylates and siloxanes 109-92-2DP, Ethyl vinyl ether, polymers with hexafluoropropylene, vinyltrimethoxysilane, and methylpolysiloxanes 116-15-4DP, Hexafluoropropylene, polymers with Et vinyl ether, vinyltrimethoxysilane, and methylpolysiloxanes 502-44-3DP, Caprolactone, reaction products with acrylate, polymers with acrylates and siloxanes 1185-55-3DP, Methyltrimethoxysilane, reaction products with silyl-contg. acrylic polymer 2530-83-8DP, 3-Glycidoxypropyltrimethoxysilane, reaction products with silyl-contg. acrylic polymer 2530-85-0DP, .gamma.-Methacryloxypropyltrimethoxysilane, polymers with acrylates and siloxanes 2768-02-7DP, Vinyltrimethoxysilane, polymers with Et vinyl ether, hexafluoropropylene, and methylpolysiloxanes 68548-08-3DP, 4-Methacryloyloxy-1,2,2,6,6-pentamethylpiperidine, polymers with acrylates and siloxanes 257868-72-7P, Ethyl vinyl ether-Methyltrimethoxysilane-Hexafluoropropylene-Dimethyldimethoxysilane-Vinyltrimethoxysilane copolymer 257868-74-9P, Ethyl vinyl ether-Hexafluoropropylene-methyltrimethoxysilane-Vinyltrimethoxysilane copolymer 307530-50-3P, Ethyl vinyl ether-Methyltrimethoxysilane-3-Glycidoxypropyltrimethoxysilane-Hexafluoropropylene-Vinyltrimethoxysilane copolymer 444200-46-8P, Butyl acrylate-Cyclohexyl methacrylate-Methyltrimethoxysilane-2-Ethylhexyl

acrylate-3-Glycidoxypropyltrimethoxysilane-Methyl
methacrylate-.gamma.-Methacryloxypropyltrimethoxysilane-4-
Methacryloyloxy-1,2,2,6,6-pentamethylpiperidine-1H,1H,5H-
Octafluoropentyl methacrylate copolymer
(manuf. of acrylic polysiloxane coating compn. for plastic films)

L14 ANSWER 4 OF 21 HCA COPYRIGHT 2003 ACS

136:402820 Transparent multilayer antireflective films having
roughness-controlled middle layers. Nishikawa, Akira; Sugiyama,
Naoki (Jsr Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002154183 A2
20020528, 17 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP
2000-354971 20001121.

AB The films comprise (A) 1-30-.mu.m-thick hard coating layers contg.
silica particles of no.-av. diam. (Dn) 5-300 nm, (B)
0.05-0.5-.mu.m-thick middle layers contg. inorg. oxide particles of
Dn 5-300 nm and satisfying surface roughness (Rz; JIS B 0601) 0.01-2
.mu.m, and (C) 0.05-0.5-.mu.m-thick surface layers contg. F compds.
and/or Si compds. and satisfy hardness of A layer (JIS K 5400,
measured on PET) .gtoreq.H and reflectance at 400-800 nm
.ltoreq.2.0%. The hard coating layer may be **photocured**
materials prepd. from trimethylolpropane tri(meth)acrylate,
trimethylolpropane trioxyethyl(meth)acrylate, and/or
(di)pentaerythritol penta(meth)acrylate. Thus, a trilayer film
comprising 0.1-.mu.m-thick layer [prepd. from Adeka Reasoap NE 30
(reactive emulsifier), Et vinyl ether, hydroxyethyl vinyl ether,
perfluoropropyl vinyl ether, hexafluoropropylene, Cymel 303
(alkoxylated methylmelamine), and VPS 1001] (silicone-contg.
macro-initiator)], 0.1-.mu.m-thick layer (Rz 0.071) comprising a
photocured polymer of a reaction product of
mercaptopropyltrimethoxysilane (I), isophorone diisocyanate (II),
and pentaerythritol triacrylate (III) and SNS 10M (antimony-doped
tin oxide, Dn 22 nm), and 10.0-.mu.m-thick layer comprising a
polymer from the above reaction product from I, II, and III, NK
Ester A TMPT (trimethylolpropane triacrylate), and NK Ester A TMPT
3EO (trimethylolpropane trioxyethylacrylate) and MEK ST (silica sol,
Dn 22 nm), was laminated on a polyester (A 4300) film to give an
antireflective film showing reflectance 0.1% at 340-700-nm, haze
1.3%, hardness 3H, and excellent scratch resistance.

IT 158947-07-0, VPS 1001

(scratch-resistance transparent multilayer antireflective films)

RN 158947-07-0 HCA

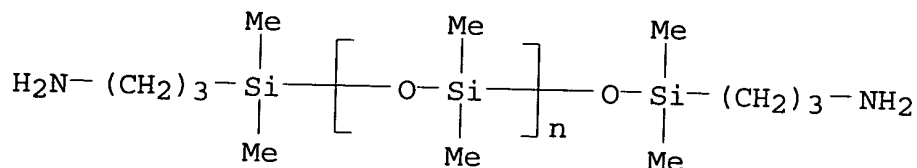
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA
INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

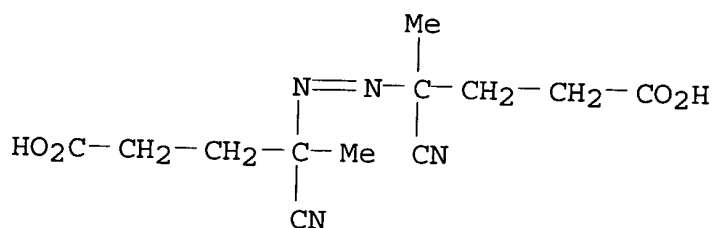
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM B32B027-20

ICS B32B007-02; B32B027-30; C09C001-30; C09D004-02; C09D005-00;
C09D007-12; C09D201-00; G02B001-11; G02B001-10

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 73

IT 158947-07-0, VPS 1001

(scratch-resistance transparent multilayer antireflective films)

L14 ANSWER 5 OF 21 HCA COPYRIGHT 2003 ACS

136:279863 **UV curable** resin composition containing

fluorine copolymer for antireflection film and the preparation of the fluoropolymer. Watanabe, Fusaka; Nishikawa, Akira (JSR Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002088122 A2 20020327, 16 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-277815 20000913.

AB The patent relates to polymer compn. contg. fluoropolymer for antireflection film. The compn. contains fluoropolymers prepd. from monomers selected from one or more of (1)-(CF₂CFR₁)-, (2)-CR₅R₇-CR₆(X-(R₈-O)_n-R₉)-, and (3)-CR₁₀R₁₂-CR₁₁(X-(R₁₃-O)_n-R₁₄)- in presence of an azo-contg. polysiloxane -SiR₁₅R₁₆O- wherein R₅-R₇, R₁₀-R₁₂ is hydrogen or C₁-C₆ alkyl, R₈ C₂-C₆ alkylene group, R₉ hydrogen and C₁-C₃₀ alkyl group or aryl basis, as for R₁₃ C₆-C₃₀ chain-like alkylene basis, R₁₄ hydrogen or hydroxyl group, X oxygen or -COO- or -OCO-, n integer of .gtoreq.3. The copolymers have fluorine content >30 wt. % and is formulated with multi-functional (meta) acrylate compds. and **radiation polymn.** initiator.

IT 158947-07-0, VPS-1001

(**UV curable** resin compn. contg. fluorine copolymer for antireflection film and the prepn. of the fluoropolymer)

RN 158947-07-0 HCA

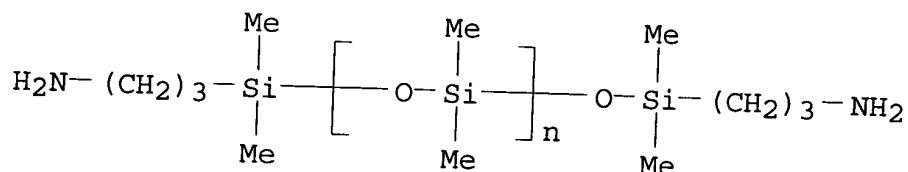
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA
 INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

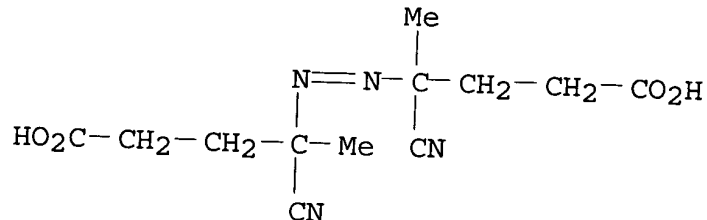
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C08F214-18

ICS C08F002-44; C08F002-46; C08F216-14; C08F291-04; C09D004-06;
C09D005-00; G02B001-11

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 42

ST fluoropolymer **light curable** resin compn
antireflective film

IT Antireflective films

(UV curable resin compn. contg. fluorine
copolymer for antireflection film and the prepn. of the
fluoropolymer)

IT Fluoropolymers, preparation

(UV curable resin compn. contg. fluorine
copolymer for antireflection film and the prepn. of the
fluoropolymer)

IT Coating materials

(UV-curable; UV curable

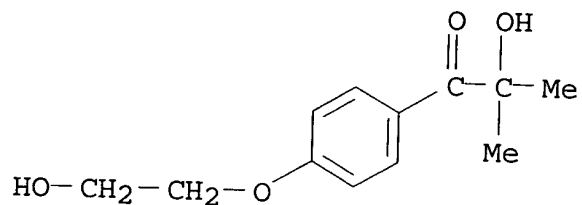
resin compn. contg. fluorine copolymer for antireflection film

- and the prepn. of the fluoropolymer)
- IT 405508-32-9P, Dodecyl vinyl ether-ethyl vinyl ether-hexafluoropropylene-N-vinyl 2-pyrrolidinone copolymer
405508-33-0P, Ethyl vinyl ether-hexafluoropropylene-methoxytriethylene glycol vinyl ether-perfluoropropyl vinyl ether copolymer
(UV curable resin compn. contg. fluorine copolymer for antireflection film and the prepn. of the fluoropolymer)
- IT 36446-02-3P, Trimethylolpropane triacrylate homopolymer
132771-99-4P, Heptadecafluorodecyl acrylate-pentaerythritol triacrylate copolymer 405508-34-1P, Dipentaerythritol hexaacrylate-heptadecafluorodecyl acrylate-pentaerythritol triacrylate copolymer
(UV curable resin compn. contg. fluorine copolymer for antireflection film and the prepn. of the fluoropolymer)
- IT 25190-89-0, KYNAR ADS 158947-07-0, VPS-1001
(UV curable resin compn. contg. fluorine copolymer for antireflection film and the prepn. of the fluoropolymer)
- L14 ANSWER 6 OF 21 HCA COPYRIGHT 2003 ACS
135:62340 Thermosetting polymer compositions, their cured products, and antireflective laminates. Itai, Shingo; Shimomura, Hiroomi; Nishikawa, Akira; Ukachi, Takashi (JSR Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001172309 A2 20010626, 18 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-361628 19991220.
- AB The compns. contain F-contg. polymeric polymn. initiators and (meth)acryloyl-contg. compds. Thus, a compn. contg. 100 parts polymer prepd. from Et vinyl ether-hexafluoropropylene-hydroxyethyl vinyl ether-perfluoro(Pr vinyl ether) copolymer and 4-(2-hydroxyethoxy)phenyl 2-hydroxy-2-Pr ketone-IPDI adduct and 20 parts trimethylolpropane triacrylate was applied on an acrylic board and cured by UV irradiation to give a film showing reflectance 2.1% and good abrasion and solvent resistance.
- IT 345961-72-0P
(thermosetting polymer compns. for antireflective films with good abrasion and solvent resistance)
- RN 345961-72-0 HCA
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 2-(ethenyloxy)ethanol, ethoxyethene, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane, 1,1,2,3,3,3-hexafluoro-1-propene and .alpha.-[1-[(nonylphenoxy)methyl]-2-(2-propenyloxy)ethyl]-.omega.-hydroxypoly[oxy-1,2-ethanediyl], ester with [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid mono[2-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenoxy]ethyl] ester (9CI)
(CA INDEX NAME)

CRN 345961-46-8
 CMF C24 H36 N2 O7
 CCI IDS

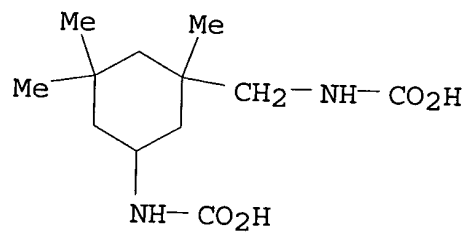
CM 2

CRN 106797-53-9
 CMF C12 H16 O4



CM 3

CRN 52337-42-5
 CMF C12 H22 N2 O4

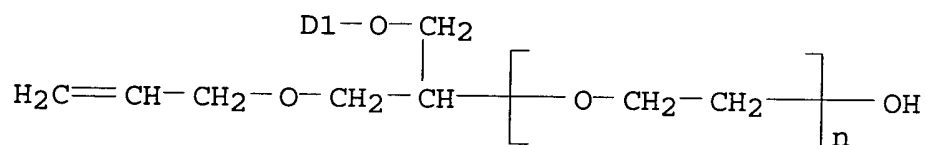
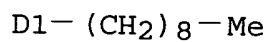
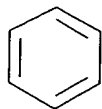


CM 4

CRN 248949-76-0
 CMF (C12 H16 N4 O4 . C5 F10 O . C4 H8 O2 . C4 H8 O . C3 F6 . (C2 H6 O Si)n C10 H28 N2 O Si2 . (C2 H4 O)n C21 H34 O3)x
 CCI PMS

CM 5

CRN 111144-60-6
 CMF (C2 H4 O)n C21 H34 O3
 CCI IDS, PMS

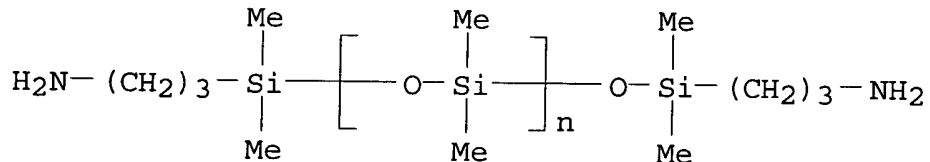


CM 6

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

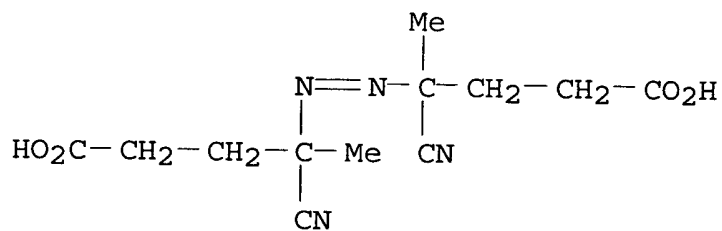
CCI PMS



CM 7

CRN 2638-94-0

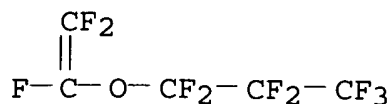
CMF C12 H16 N4 O4



CM 8

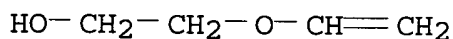
CRN 1623-05-8

CMF C5 F10 O



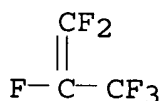
CM 9

CRN 764-48-7
CMF C4 H8 O2



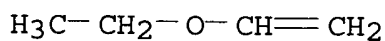
CM 10

CRN 116-15-4
CMF C3 F6



CM 11

CRN 109-92-2
CMF C4 H8 O



IT 248949-76-0P

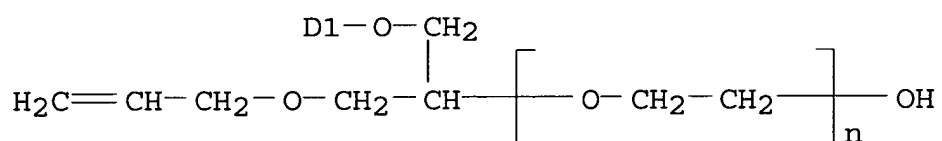
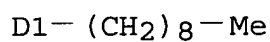
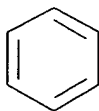
(thermosetting polymer compns. for antireflective films with good abrasion and solvent resistance)

RN 248949-76-0 HCA

CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], 2-(ethenyloxy)ethanol, ethoxyethene, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane, 1,1,2,3,3,3-hexafluoro-1-propene and .alpha.-[1-[(nonylphenoxy)methyl]-2-(2-propenyloxy)ethyl]-.omega.-hydroxypoly[oxy-1,2-ethanediyl] (9CI) (CA INDEX NAME)

CM 1

CRN 111144-60-6
CMF (C2 H4 O)n C21 H34 O3
CCI IDS, PMS

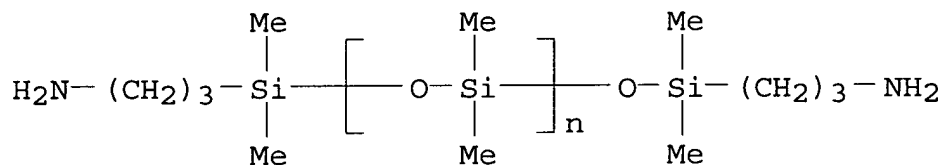


CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

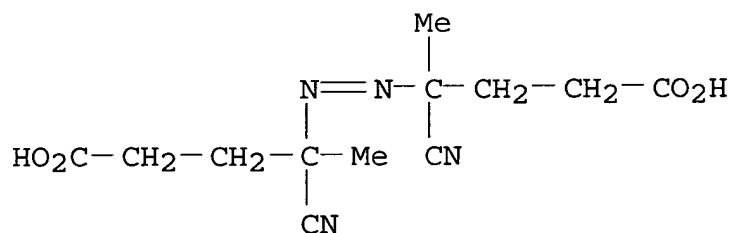
CCI PMS



CM 3

CRN 2638-94-0

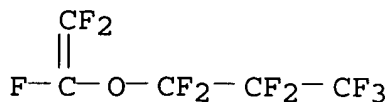
CMF C12 H16 N4 O4



CM 4

CRN 1623-05-8

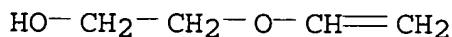
CMF C5 F10 O



CM 5

CRN 764-48-7

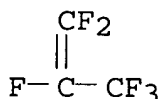
CMF C4 H8 O2



CM 6

CRN 116-15-4

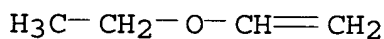
CMF C3 F6



CM 7

CRN 109-92-2

CMF C4 H8 O



IC ICM C08F004-00

ICS C08F020-18; C09D004-06; C09D005-00; C09D127-12; C09D183-10;
G03F007-027; G03F007-029; G03F007-075

CC 38-3 (Plastics Fabrication and Uses)

IT Polymerization catalysts

(photopolymn.; thermosetting polymer compns. for
antireflective films with good abrasion and solvent resistance)

IT 345961-47-9P 345961-72-0P

(thermosetting polymer compns. for antireflective films with good
abrasion and solvent resistance)

IT 248949-76-0P 345960-56-7P 345960-57-8P 345960-58-9P

(thermosetting polymer compns. for antireflective films with good
abrasion and solvent resistance)

L14 ANSWER 7 OF 21 HCA COPYRIGHT 2003 ACS

135:6972 Photocurable acrylic silicone block copolymers, their
manufacture, compositions, and transparent coatings with good soil

resistance. Nakamura, Naoya; Yamada, Yoshio (Chugoku Marine Paints, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001151813 A2 20010605, 22 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-338480 19991129.

AB The copolymers contain (A) units derived from polydimethylsiloxane-based azo compds. having polar groups, (B) (meth)acrylic acid ester units derived from adducts of unsatd. carboxylic acid esters contg. epoxy groups with unsatd. carboxylic acids, and (C) units derived from monomers copolymerizable with A and B. The coatings are applied to construction materials, furniture, floor coverings, bathrooms, and kitchens. Thus, VPS 0501 (polar group-contg. polydimethylsiloxane-based azo compd.)-Me methacrylate-glycidyl methacrylate copolymer acrylate was mixed (100 parts) with 0.5 part each of benzophenone and Irgacure 184 to give a coating.

IT 342399-10-4P

(photocurable acrylic silicone block copolymers for transparent coatings with good soil resistance)

RN 342399-10-4 HCA

CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, 2-propenoate (ester), block, homopolymer (9CI) (CA INDEX NAME)

CM 1

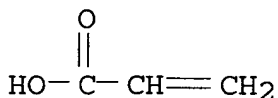
CRN 342399-09-1

CMF (C12 H16 N4 O4 . C7 H10 O3 . C5 H8 O2 . (C2 H6 O Si)n C10 H28 N2 O Si2)x . x C3 H4 O2

CM 2

CRN 79-10-7

CMF C3 H4 O2



CM 3

CRN 342399-08-0

CMF (C12 H16 N4 O4 . C7 H10 O3 . C5 H8 O2 . (C2 H6 O Si)n C10 H28 N2 O Si2)x

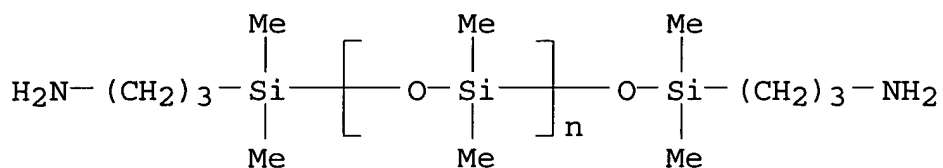
CCI PMS

CM 4

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

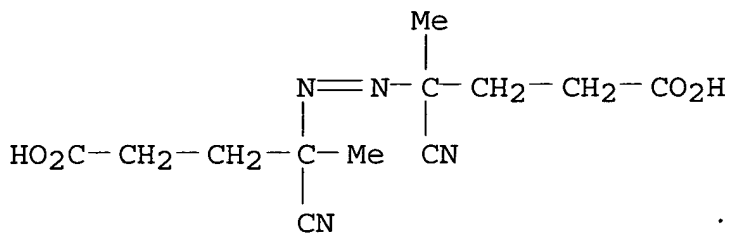
CCI PMS



CM 5

CRN 2638-94-0

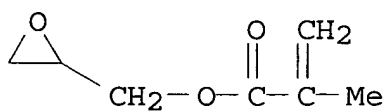
CMF C12 H16 N4 O4



CM 6

CRN 106-91-2

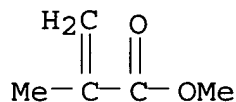
CMF C7 H10 O3



CM 7

CRN 80-62-6

CMF C5 H8 O2



IT 342399-09-1P

(photocurable acrylic silicone block copolymers for transparent coatings with good soil resistance)

RN 342399-09-1 HCA

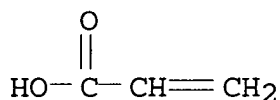
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with

.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, 2-propenoate (ester), block (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7

CMF C3 H4 O2



CM 2

CRN 342399-08-0

CMF (C12 H16 N4 O4 . C7 H10 O3 . C5 H8 O2 . (C2 H6 O Si)n C10 H28 N2 O Si2)x

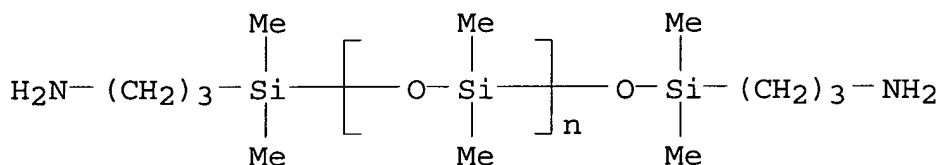
CCI PMS

CM 3

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

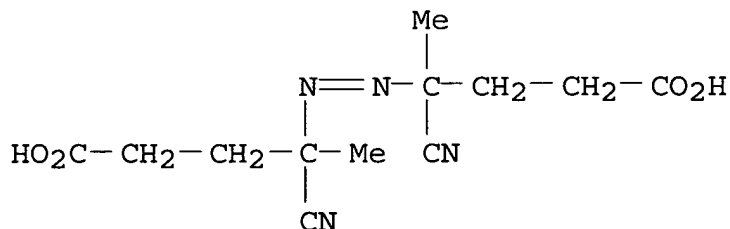
CCI PMS



CM 4

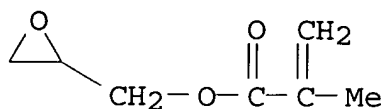
CRN 2638-94-0

CMF C12 H16 N4 O4



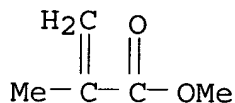
CM 5

CRN 106-91-2
CMF C7 H10 O3



CM 6

CRN 80-62-6
CMF C5 H8 O2



- IC ICM C08F008-14
ICS C08F299-00; C08G059-17; C09D004-02; C09D005-00
- CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 58
- ST polydimethylsiloxane polyamide acrylic coating soil resistance;
construction material coating silicone acrylic block; furniture
coating polysiloxane polyamide acrylic transparent; floor covering
coating silicone acrylic block; bathroom coating
photocurable polysiloxane polyamide acrylic; kitchen coating
polysiloxane polyamide acrylic transparent
- IT Coating materials
(antisoiling; **photocurable** acrylic silicone block
copolymers for transparent coatings with good soil resistance)
- IT Buildings
(bathrooms; **photocurable** acrylic silicone block
copolymers for transparent coatings with good soil resistance
for)
- IT Buildings
(kitchens; **photocurable** acrylic silicone block
copolymers for transparent coatings with good soil resistance
for)
- IT Construction materials
Floor coverings
Furniture
(**photocurable** acrylic silicone block copolymers for
transparent coatings with good soil resistance for)
- IT Polysiloxanes, uses
(polyamide-, acrylic; **photocurable** acrylic silicone
block copolymers for transparent coatings with good soil
resistance)

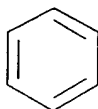
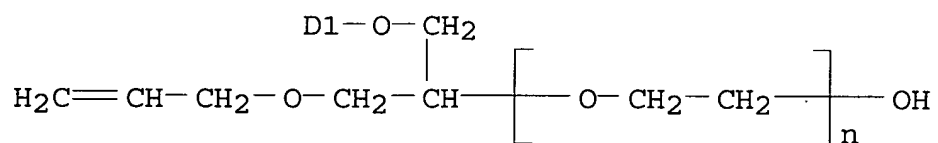
- IT Polysiloxanes, preparation
(polyamide-, block, acrylates; **photocurable** acrylic
silicone block copolymers for transparent coatings with good soil
resistance)
- IT Polyamides, uses
(polysiloxane-, acrylic; **photocurable** acrylic silicone
block copolymers for transparent coatings with good soil
resistance)
- IT Polyamides, preparation
(polysiloxane-, block, acrylates; **photocurable** acrylic
silicone block copolymers for transparent coatings with good soil
resistance)
- IT Coating materials
(transparent; **photocurable** acrylic silicone block
copolymers for transparent coatings with good soil resistance)
- IT **342399-10-4P**
(**photocurable** acrylic silicone block copolymers for
transparent coatings with good soil resistance)
- IT **342399-09-1P**
(**photocurable** acrylic silicone block copolymers for
transparent coatings with good soil resistance)
- L14 ANSWER 8 OF 21 HCA COPYRIGHT 2003 ACS
- 134:267337 **Radiation-curable** resin compositions and
their antireflective cured products. Nishikawa, Akira; Irie,
Tomoko; Ukachi, Takashi (JSR Co., Ltd., Japan). Jpn. Kokai Tokkyo
Koho JP 2001089623 A2 20010403, 15 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1999-271841 19990927.
- AB The compns. comprise (A) fluoropolymers contg. OH and/or epoxy
groups, (B) compds. contg. .gtoreq.2 alkoxyalkylamino or
hydroxyalkylamino groups in a mol., and (C) **acid**
generators of disulfonylmethanes and/or
tri(alkoxyphenyl)sulfonium sulfonates. Thus, perfluoro(Pr vinyl
ether)-Et vinyl ether-hydroxyethyl vinyl ether-hexafluoropropylene
copolymer was mixed with alkoxymethylated melamine (MX 303) and
1,1-bis(phenylsulfonyl)cyclohexane, applied on an acrylic resin
plate, **UV-cured**, and post-cured at 80.degree.
for 15 min to give a laminate showing reflection 1.8%, and good
scratch and solvent resistance.
- IT **248949-64-6P 331814-20-1P**
(**radiation-curable** resin compns. for
antireflective laminated films)
- RN 248949-64-6 HCA
- CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],
[(ethenyloxy)methyl]oxirane, ethoxyethene, formaldehyde,
1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane,
1,1,2,3,3,3-hexafluoro-1-propene, .alpha.-[1-[(nonylphenoxy)methyl]-
2-(2-propenyloxy)ethyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and
1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1 .

CRN 111144-60-6

CMF (C2 H4 O)_n C21 H34 O3

CCI IDS, PMS

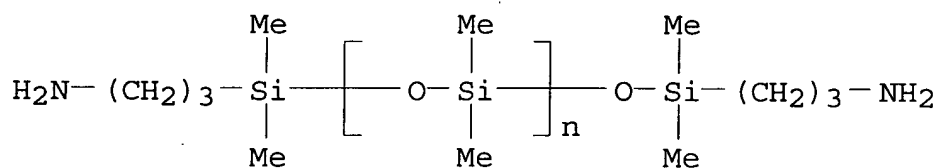
D1- (CH₂)₈-Me

CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

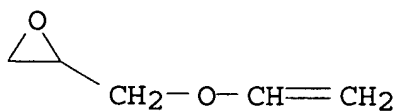
CCI PMS



CM 3

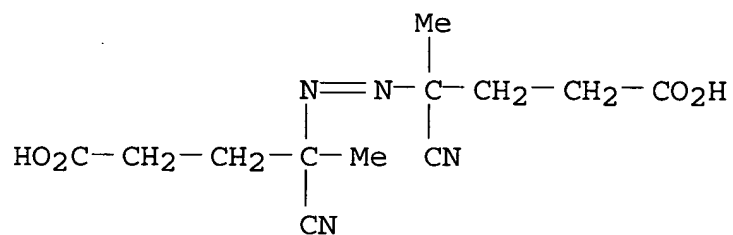
CRN 3678-15-7

CMF C5 H8 O2



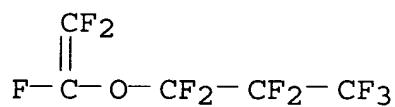
CM 4

CRN 2638-94-0
CMF C12 H16 N4 O4



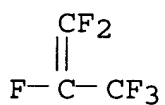
CM 5

CRN 1623-05-8
CMF C5 F10 O



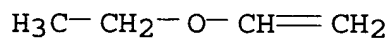
CM 6

CRN 116-15-4
CMF C3 F6



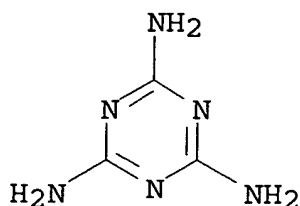
CM 7

CRN 109-92-2
CMF C4 H8 O



CM 8

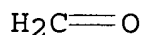
CRN 108-78-1
CMF C3 H6 N6



CM 9

CRN 50-00-0

CMF C H2 O



RN 331814-20-1 HCA

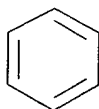
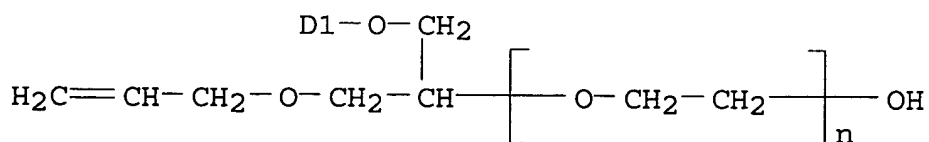
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],
 2-(ethenyloxy)ethanol, ethoxyethene, formaldehyde,
 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane,
 1,1,2,3,3,3-hexafluoro-1-propene, .alpha.-[1-[(nonylphenoxy)methyl]-
 2-(2-propenyloxy)ethyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl) and
 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 111144-60-6

CMF (C2 H4 O)_n C21 H34 O3

CCI IDS, PMS

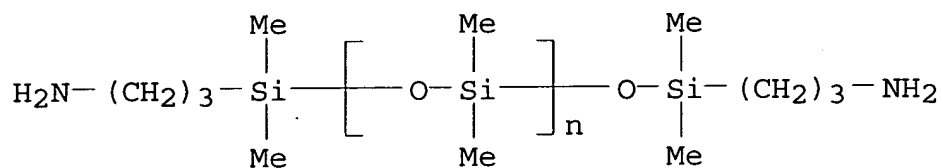
D1-(CH₂)₈-Me

CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

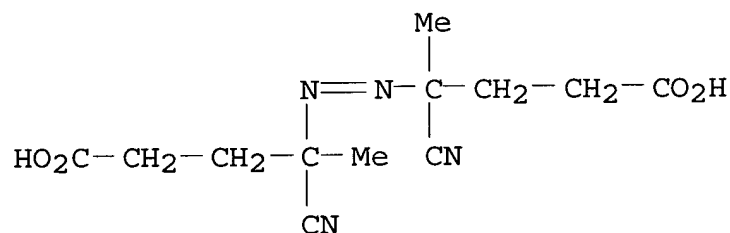
CCI PMS



CM 3

CRN 2638-94-0

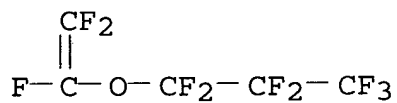
CMF C12 H16 N4 O4



CM 4

CRN 1623-05-8

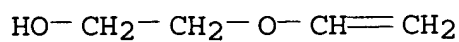
CMF C5 F10 O



CM 5

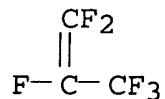
CRN 764-48-7

CMF C4 H8 O2



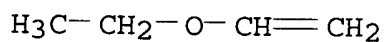
CM 6

CRN 116-15-4
CMF C3 F6



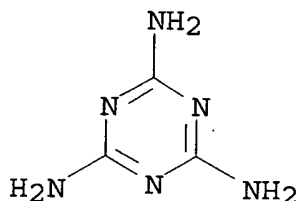
CM 7

CRN 109-92-2
CMF C4 H8 O



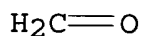
CM 8

CRN 108-78-1
CMF C3 H6 N6



CM 9

CRN 50-00-0
CMF C H2 O



IC ICM C08L027-12
ICS C07C317-12; C07C317-14; C07C317-20; C07C317-22; C07C317-24;
C08G059-34; C08G059-68; C08J003-24; C08K005-3477; C08K005-41;
C08K005-42
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 73
ST fluoropolymer phenylsulfonylecyclohexane **radiation**
cure antireflection film; alkoxyphenylsulfonium sulfonate
catalyst UV cure fluoropolymer; scratch
resistance melamine fluoropolymer laminate
IT Fluoropolymers, uses

- (aminoplast-; **radiation-curable** resin compns. for antireflective laminated films)
- IT Polysiloxanes, uses
(aminoplast-epoxy-polyoxyalkylene-, fluorine-contg.; **radiation-curable** resin compns. for antireflective laminated films)
- IT Fluoropolymers, uses
(aminoplast-epoxy-polyoxyalkylene-polysiloxane-; **radiation-curable** resin compns. for antireflective laminated films)
- IT Polyoxyalkylenes, uses
(aminoplast-epoxy-polysiloxane-, fluorine-contg.; **radiation-curable** resin compns. for antireflective laminated films)
- IT Polysiloxanes, uses
(aminoplast-polyoxyalkylene-, fluorine-contg.; **radiation-curable** resin compns. for antireflective laminated films)
- IT Epoxy resins, uses
Polyoxyalkylenes, uses
(aminoplast-polyoxyalkylene-polysiloxane-, fluorine-contg.; **radiation-curable** resin compns. for antireflective laminated films)
- IT Fluoropolymers, uses
(aminoplast-polyoxyalkylene-polysiloxane-; **radiation-curable** resin compns. for antireflective laminated films)
- IT Aminoplasts
(epoxy, fluorine-contg.; **radiation-curable** resin compns. for antireflective laminated films)
- IT Aminoplasts
(epoxy-polyoxyalkylene-polysiloxane-, fluorine-contg.; **radiation-curable** resin compns. for antireflective laminated films)
- IT Aminoplasts
(fluorine-contg.; **radiation-curable** resin compns. for antireflective laminated films)
- IT Antireflective films
(multilayer; **radiation-curable** resin compns. for antireflective laminated films)
- IT **Crosslinking catalysts**
(photochem.; **radiation-curable** resin compns. for antireflective laminated films)
- IT Aminoplasts
(polyoxyalkylene-polysiloxane-, fluorine-contg.; **radiation-curable** resin compns. for antireflective laminated films)
- IT 66003-78-9, Triphenylsulfonium trifluoromethanesulfonate
88073-51-2, Benzene, 1,1'-[cyclopentylidenebis(sulfonyl)]bis-
90555-42-3 103979-48-2, Benzene, 1,1'-
[cyclohexylidenebis(sulfonyl)]bis- 149125-91-7,
Tris(p-methoxyphenyl)sulfonium triflate
(**curing catalyst; radiation-**

curable resin compns. for antireflective laminated films)
 IT 248949-64-6P 331814-19-8P 331814-20-1P
 331841-71-5P
 (radiation-curable resin compns. for
 antireflective laminated films)

L14 ANSWER 9 OF 21 HCA COPYRIGHT 2003 ACS

134:102314 UV-curable scratch-resistant urethane
 (meth)acrylate coating compositions. Ohno, Tomihisa; Fushimi,
 Keiichi; Teranishi, Shigekazu; Fujii, Kozo; Miyake, Toshikatsu;
 Kawakami, Susumu (Natoco Paint K. K., Japan). Jpn. Kokai Tokkyo
 Koho JP 2001002744 A2 20010109, 12 pp. (Japanese). CODEN: JKXXAF.
 APPLICATION: JP 1999-173857 19990621.

AB The compns. contain (A) urethane (meth)acrylate oligomers manufd.
 from prepolymers having .gtoreq.3 isocyanate groups and
 polycaprolactone-modified hydroxyethyl (meth)acrylates and (B)
 photopolymn. initiators. Thus, a compn. contg. a reaction
 product of Takenate D 212 (isocyanurate-modified TDI) and Placel FA
 3 (polycaprolactone-modified hydroxyethyl acrylate) 80, a reaction
 product of pentaerythritol triacrylate (Aronix M 305) and Silaplane
 FM 0721 (polydimethylsiloxane macromonomer)-Me methacrylate-Bu
 methacrylate-Karenzu MOI (isocyanatoethyl methacrylate) copolymer
 10, acryloylmorpholine 9, and Irgacure 184 1 part was irradiated by
 UV to give coatings showing good adhesion, bending and impact
 resistance.

IT 318283-77-1P 318283-80-6P
 (UV-curable scratch-resistant urethane
 (meth)acrylate coating compns.)

RN 318283-77-1 HCA

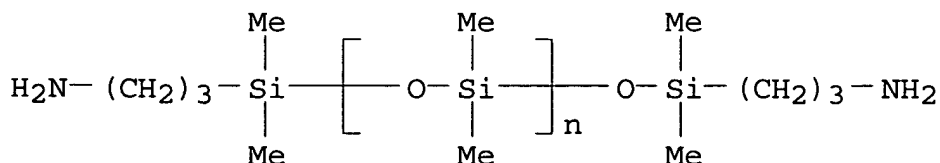
CN Hexanoic acid, 6-hydroxy-, 6-oxo-6-[2-[(1-oxo-2-
 propenyl)oxy]ethoxy]hexyl ester, polymer with .alpha.-[(3-
 aminopropyl)dimethylsilyl]-.omega.-[[[(3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]],
 4,4'-azobis[4-cyanopentanoic acid], butyl 2-methyl-2-propenoate,
 Coronate L, 2-(hydroxymethyl)-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-
 propanediyl di-2-propenoate, 2-isocyanatoethyl 2-methyl-2-
 propenoate, methyl 2-methyl-2-propenoate and 4-(1-oxo-2-
 propenyl)morpholine (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

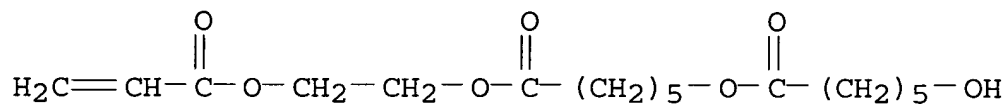
CMF (C2 H6 O Si)n C10 H28 N2 O Si2

CCI PMS



CM 2

CRN 80413-52-1
 CMF C17 H28 O7



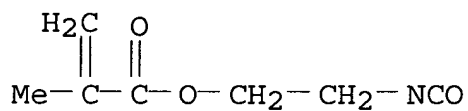
CM 3

CRN 39278-79-0
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

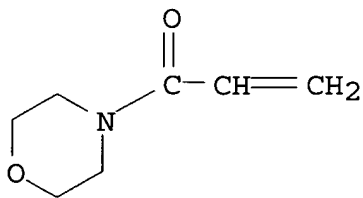
CM 4

CRN 30674-80-7
 CMF C7 H9 N O3



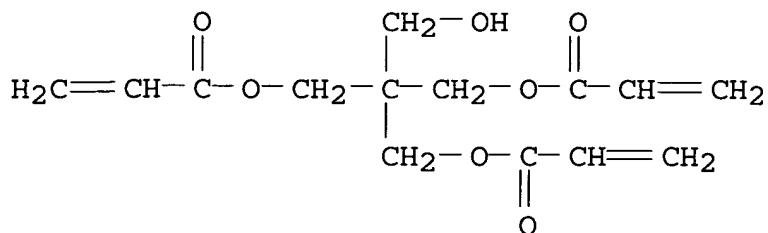
CM 5

CRN 5117-12-4
 CMF C7 H11 N O2



CM 6

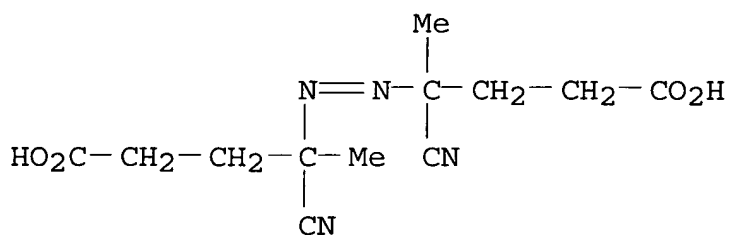
CRN 3524-68-3
 CMF C14 H18 O7



CM 7

CRN 2638-94-0

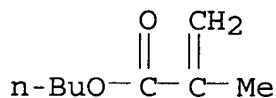
CMF C12 H16 N4 O4



CM 8

CRN 97-88-1

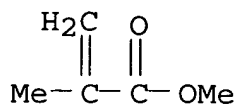
CMF C8 H14 O2



CM 9

CRN 80-62-6

CMF C5 H8 O2



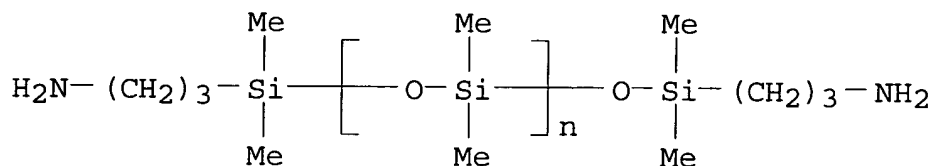
RN 318283-80-6 HCA

CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], Burnock
DN 950, butyl 2-methyl-2-propenoate, 2-(hydroxymethyl)-2-[[[1-oxo-2-

propenyl)oxy)methyl]-1,3-propanediyl di-2-propenoate,
 2-isocyanatoethyl 2-methyl-2-propenoate, methyl 2-methyl-2-
 propenoate and .alpha.-[2-[(1-oxo-2-propenyl)oxy]ethyl]-.omega.-
 hydroxypoly[oxy(1-oxo-1,6-hexanediyl)] (9CI) (CA INDEX NAME)

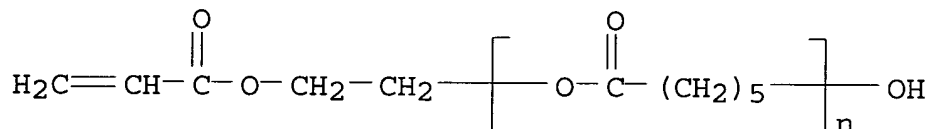
CM 1

CRN 97917-34-5
 CMF (C2 H6 O Si)_n C10 H28 N2 O Si2
 CCI PMS



CM 2

CRN 81984-58-9
 CMF (C6 H10 O2)_n C5 H8 O3
 CCI PMS



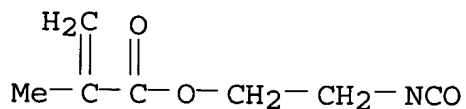
CM 3

CRN 61287-26-1
 CMF Unspecified
 CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

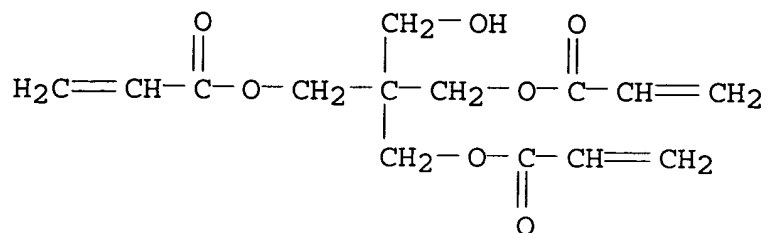
CM 4

CRN 30674-80-7
 CMF C7 H9 N O3



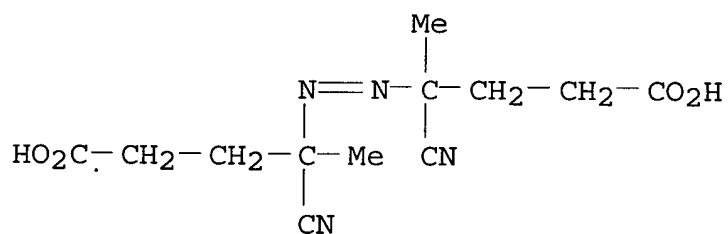
CM 5

CRN 3524-68-3
CMF C14 H18 O7



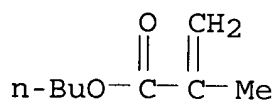
CM 6

CRN 2638-94-0
CMF C12 H16 N4 O4



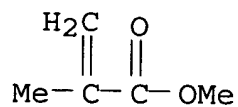
CM 7

CRN 97-88-1
CMF C8 H14 O2



CM 8

CRN 80-62-6
CMF C5 H8 O2



IC ICM C08F299-06
ICS C08F002-50; C08G018-42; C09D005-00; C09D175-14; C09D183-07

- CC 42-10 (Coatings, Inks, and Related Products)
- ST urethane acrylic polysiloxane coating scratch resistance; polyisocyanurate polyurethane acrylic coating **UV curable**; polycaprolactone polyurethane acrylic coating impact resistance; polyester polyurethane acrylic coating bending resistance
- IT Coating materials
(**UV-curable**; scratch-resistant urethane (meth)acrylate coating compns.)
- IT Polysiloxanes, uses
(acrylic-polyester-; **UV-curable** scratch-resistant urethane (meth)acrylate coating compns.)
- IT Polyesters, uses
(acrylic-polysiloxane-; **UV-curable** scratch-resistant urethane (meth)acrylate coating compns.)
- IT Polysiloxanes, reactions
(graft **polymers**, GUV 235, **UV-curable** ; **UV-curable** scratch-resistant urethane (meth)acrylate coating compns.)
- IT Coating materials
(scratch-resistant; **UV-curable** scratch-resistant urethane (meth)acrylate coating compns.)
- IT 70780-97-1DP, Takenate D 140N, reaction products with polycaprolactone-modified hydroxyethyl acrylate, polymers with polysiloxane graft copolymer 80413-52-1DP, Placel FA 2, reaction products with hexamethylene diisocyanate biuret, **polymers** 80413-54-3DP, Placel FA 1, reaction products with isocyanates, **polymers** 120860-41-5DP, Takenate D 170N, reaction products with polycaprolactone-modified hydroxyethyl acrylate, **polymers** 132965-69-6DP, Takenate D 165N, reaction products with polycaprolactone-modified hydroxyethyl acrylate, **polymers** 318283-76-0P **318283-77-1P** 318283-78-2P 318283-79-3P **318283-80-6P** 318283-81-7P 318283-82-8P
(**UV-curable** scratch-resistant urethane (meth)acrylate coating compns.)
- IT 61287-26-1DP, Burnock DN 950, reaction products with polycaprolactone-modified hydroxyethyl acrylate, polymers with polysiloxane graft copolymer 80413-52-1DP, Placel FA 2, reaction products with isocyanate prepolymers, polymers with polysiloxane-acrylate copolymers and acryloylmorpholine 80413-54-3DP, Placel FA 1, reaction products with isocyanurate-modified HDI, polymers with polysiloxane-acrylate copolymers and acryloylmorpholine
(**UV-curable** scratch-resistant urethane (meth)acrylate coating compns.)
- L14 ANSWER 10 OF 21 HCA COPYRIGHT 2003 ACS
- 134:18656 Curable polysiloxane ink and ink-jet printing therewith. Sekiguchi, Manabu; Miyamoto, Masahiro; Sato, Hozumi (JSR Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000327980 A2 20001128, 13 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-136564 19990518.

AB Title polysiloxane ink with easy viscosity adjustment and good storability and curability comprises (A) hydrolysable silane compds. (or their hydrolyzates), represented by $(R1)_pSi(X)_4-p$ ($R1$: C1-12 nonhydrolyasable group; X : hydrolysable group; p : integer 0-3), (B) **photoacid** generators, and (C) colorants. Thus, a compn. comprising Me trimethoxysilane hydrolyzate 100, CD 1012 (**photoacid** generator) 0.7, Pigment Red 122 6.0, and Me orthoformate 3.0 parts was used for ink-jet printing and **cured by UV radiation.**

IT 309963-96-0P

(prepn. of curable polysiloxane ink-jet ink)

RN 309963-96-0 HCA

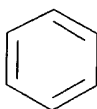
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 4-(ethenyloxy)-1-butanol, ethoxyethene, 1,1,2,3,3,3-hexafluoro-1-propene, .alpha.-[1-[(nonylphenoxy)methyl]-2-(2-propenyloxy)ethyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl), triethoxy(3-isocyanatopropyl)silane and trimethoxymethylsilane (9CI) (CA INDEX NAME)

CM 1

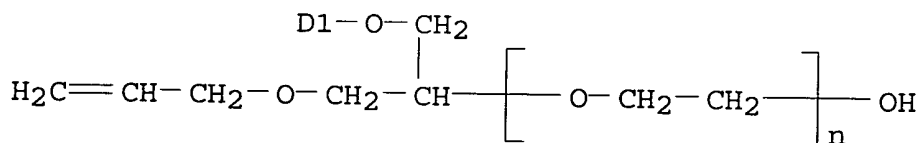
CRN 111144-60-6

CMF $(C_2 H_4 O)_n C_{21} H_{34} O_3$

CCI IDS, PMS



D1-(CH₂)₈-Me

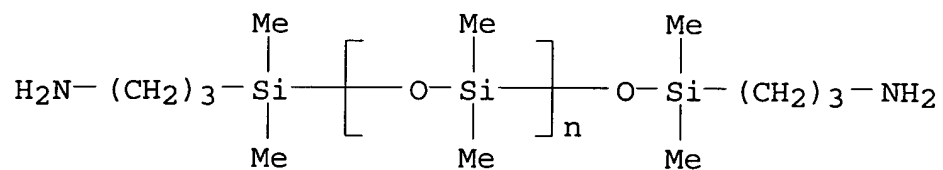


CM 2

CRN 97917-34-5

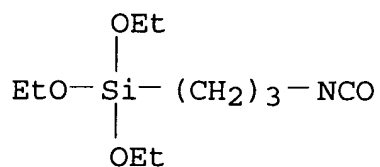
CMF $(C_2 H_6 O Si)_n C_{10} H_{28} N_2 O Si_2$

CCI PMS



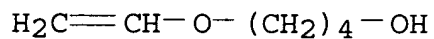
CM 3

CRN 24801-88-5
CMF C10 H21 N O4 Si



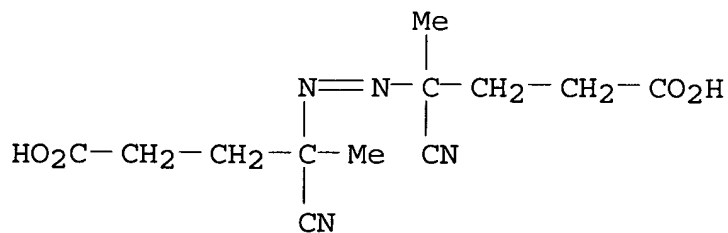
CM 4

CRN 17832-28-9
CMF C6 H12 O2



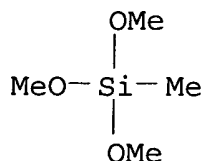
CM 5

CRN 2638-94-0
CMF C12 H16 N4 O4



CM 6

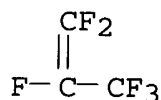
CRN 1185-55-3
CMF C4 H12 O3 Si



CM 7

CRN 116-15-4

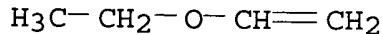
CMF C3 F6



CM 8

CRN 109-92-2

CMF C4 H8 O



IC ICM C09D011-10

ICS B41J002-01

CC 42-12 (Coatings, Inks, and Related Products)

IT Inks

(printing, UV-curable; prepn. of curable polysiloxane ink-jet ink)

IT 25498-03-7P, Methyltrimethoxysilane homopolymer 153315-80-1P,
Methyltrimethoxysilane homopolymer, sru 309963-96-0P
(prepn. of curable polysiloxane ink-jet ink)

L14 ANSWER 11 OF 21 HCA COPYRIGHT 2003 ACS

133:351246 **Radiation-curable** siloxane

group-containing hexafluoropropylene copolymer compositions with good adhesion to substrates, and transparent scratch-resistant coatings and antireflection films thereof. Shinohara, Nobuyasu; Sato, Hozumi; Hashiguchi, Hirokazu; Shimomura, Hiroomi (JSR Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000313709 A2 20001114, 16 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-122447 19990428.

AB The compns. contain siloxane group-contg. hexafluoropropylene copolymers and .alpha.-fluoroacrylate monomers. Thus, 39.7:9.7:33.8:13.6:1.1:2.1 mol hexafluoropropylene-perfluoro(Pr vinyl ether)-Et vinyl ether-hydroxyethyl vinyl ether-Adeka Reasoap NE 30 (reactive nonionic emulsifier)-dimethylsiloxane block

copolymer (Mn 76,800) 10.0, trifluoroethyl .alpha.-fluoroacrylate 90, and Irgacure 184 (initiator) 3.0 g were mixed, applied on a glass plate, and irradiated with a high-pressure Hg lamp to form a transparent film with reflective index 1.404.

IT 158947-07-0, VPS 1001

(polymn. initiator; **radiation-curable**

siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)

RN 158947-07-0 HCA

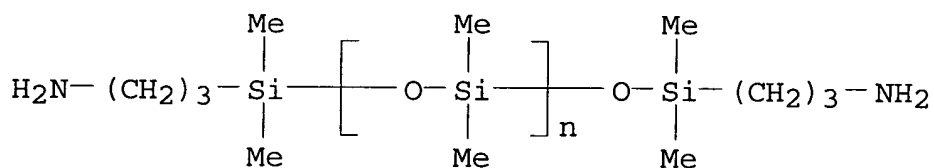
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

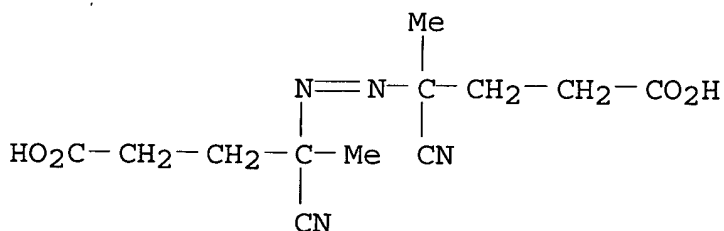
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C08F002-46

ICS C08L027-12; C09D004-02; C08F020-22

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 42

ST **radiation curable** polyhexafluoropropylene

siloxane block antireflection; polytrifluoroethyl fluoroacrylate

siloxane blend antireflection film; transparency scratch resistance

block siloxane coating

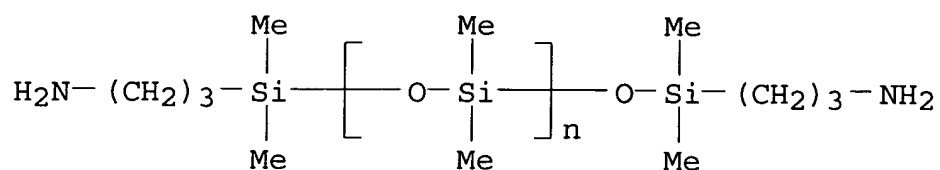
IT Coating materials

(abrasion-resistant; **radiation-curable**

- siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)
- IT Coating materials
(antisoiling; **radiation-curable** siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)
- IT Polymerization catalysts
(azo group-contg. polysiloxanes; **radiation-curable** siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)
- IT Polysiloxanes, uses
Polysiloxanes, uses
(fluorine-contg., block; **radiation-curable** siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)
- IT Emulsifying agents
(nonionic, **reactive**; **radiation-curable** siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)
- IT Polysiloxanes, uses
Polysiloxanes, uses
(polyamide-, **polymn.** initiators; **radiation-curable** siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)
- IT Fluoropolymers, uses
Fluoropolymers, uses
(polysiloxane-, block; **radiation-curable** siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)
- IT Polyamides, uses
Polyamides, uses
(polysiloxane-, **polymn.** initiators; **radiation-curable** siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)
- IT Antireflective films
Plastic films
Transparent films
(**radiation-curable** siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)
- IT Fluoropolymers, uses
(**radiation-curable** siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)
- IT Polymer blends
(**radiation-curable** siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)
- IT Coating materials
(**radiation-curable**; **radiation-curable** siloxane group-contg. hexafluoropropylene copolymer compns. for coatings and antireflection films)

- IT Coating materials
(scratch-resistant; **radiation-curable**
siloxane group-contg. hexafluoropropylene copolymer compns. for
coatings and antireflection films)
- IT Coating materials
(transparent; **radiation-curable** siloxane
group-contg. hexafluoropropylene copolymer compns. for coatings
and antireflection films)
- IT 158947-07-0, VPS 1001
(**polymn.** initiator; **radiation-curable**
siloxane group-contg. hexafluoropropylene copolymer compns. for
coatings and antireflection films)
- IT 95243-61-1P 96250-38-3P 305819-87-8P, Hexafluoropropylene-
perfluoro(Pr vinyl ether)-ethyl vinyl ether-hydroxyethyl vinyl
ether-Adeka Reasoap NE 30-dimethylsilanediol block copolymer
(**radiation-curable** siloxane group-contg.
hexafluoropropylene copolymer compns. for coatings and
antireflection films)
- L14 ANSWER 12 OF 21 HCA COPYRIGHT 2003 ACS
- 133:209420 Waterproof polysiloxane wax compositions with high gloss, and
removal of their coatings. Wakao, Hideki; Nishida, Hideo; Tago,
Kazuto; Arimoto, Kunio (Ishihara Yakuhin Co., Ltd., Japan). Jpn.
Kokai Tokyo Koho JP 2000239329 A2 20000905, 8 pp. (Japanese).
CODEN: JKXXAF. APPLICATION: JP 1999-78234 19990217.
- AB The compns., useful for automobile bodies, contain (A) copolymers
manufd. from (A1) unsatd. carboxylic acids, (A2) (meth)acrylic acid
C1-8 alkyl-contg. esters, and (A3) CH₂:CR₁CO₂R₂(SiMe₂O)_aSiMe₂R₃ [I;
R₁ = H, Me; R₂ = C1-6 alkylene(oxy); R₃ = C1-6 alkyl, alkoxy, OH; a
= 5-300], or (A4) CO(CH₂)_bCMe(CN)N:NCMe(CN)(CH₂)_bCOAR₂SiMe₂(OSiMe₂)_O
SiMe₂R₂A [A = O, NH; b = 0-6; c = 5-300; R₂ = same as above] and (B)
C18-36 fatty acids. Soiled films of the compns. are removed by
using alk. detergents having PH 8-14. A soln. contg. a wax
comprising 50% copolymer **manufd.** from methacrylic
acid 40, Bu methacrylate 20, and I [a = 20, R₁ = R₃ = Me, R₂
= (CH₂)₃] 40 g and 50% stearic acid was applied on a test piece to
give a coating showing contact angle 92.degree. and increase in
gloss.
- IT 290312-58-2P
(alkali-removable polysiloxane wax compns. with high gloss and
water repellency for automobile bodies)
- RN 290312-58-2 HCA
- CN Hexanoic acid, 5,5'-azobis[5-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl
2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX
NAME)
- CM 1
- CRN 97917-34-5
- CMF (C₂ H₆ O Si)_n C₁₀ H₂₈ N₂ O Si₂

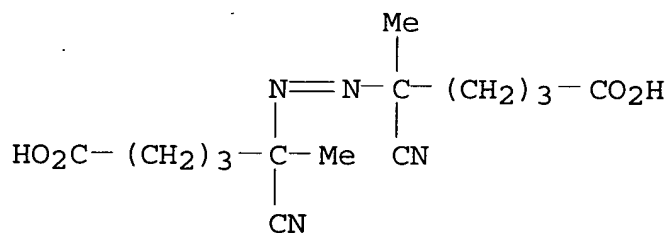
CCI PMS



CM 2

CRN 80821-73-4

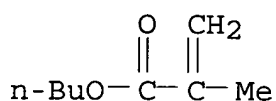
CMF C14 H20 N4 O4



CM 3

CRN 97-88-1

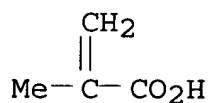
CMF C8 H14 O2



CM 4

CRN 79-41-4

CMF C4 H6 O2



IC ICM C08F290-04

ICS C08F220-04; C08F220-18; C09D151-00; C09D183-08; C09D133-14; C09K003-18

CC 42-11 (Coatings, Inks, and Related Products)

IT 172351-71-2P 290312-58-2P

(alkali-removable polysiloxane wax compns. with high gloss and

water repellency for automobile bodies)

L14 ANSWER 13 OF 21 HCA COPYRIGHT 2003 ACS

133:209397 Alkali-removable coating materials and removing methods for coatings. Tago, Kazuto; Nishida, Hideo; Wakao, Hideki; Arimoto, Kunio (Ishihara Yakuhin Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000239599 A2 20000905, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-78233 19990217.

AB Coating materials contain copolymers of unsatd. carboxylic acids 15-70, (meth)acrylate esters 10-50, and alkyl (C1-8) (meth)acrylates substituted with dimethylpolysiloxane or azo group-contg. dimethylpolysiloxanes 10-70%. Thus, a copolymer was **prepd** from methacrylic **acid** 40, Bu methacrylate 20, and CH₂:CMeCO₂(CH₂)₃(SiMe₂O)_nSiMe₃ 40%.

IT 289885-21-8P

(alkali-removable coating materials and removing methods for coatings)

RN 289885-21-8 HCA

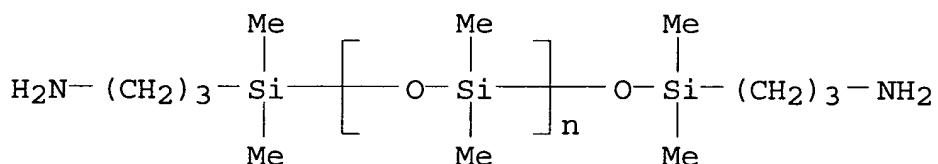
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C₂ H₆ O Si)_n C₁₀ H₂₈ N₂ O Si₂

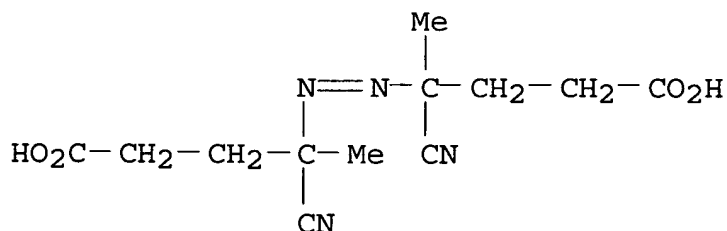
CCI PMS



CM 2

CRN 2638-94-0

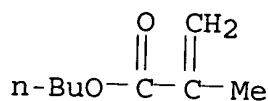
CMF C₁₂ H₁₆ N₄ O₄



CM 3

CRN 97-88-1

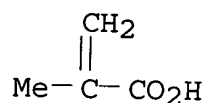
CMF C8 H14 O2



CM 4

CRN 79-41-4

CMF C4 H6 O2



IC ICM C09D133-14

ICS C09D009-00; C09D183-08; C08F290-06

CC 42-10 (Coatings, Inks, and Related Products)

IT 289885-20-7P **289885-21-8P**

(alkali-removable coating materials and removing methods for coatings)

L14 ANSWER 14 OF 21 HCA COPYRIGHT 2003 ACS

133:106338 Pigment dispersants and light- and water-resistant aqueous inks therefrom. Ikeda, Junichi; Hatanaka, Yuka (Kyoeisha Chemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000204309 A2 20000725, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-6810 19990113.

AB Title dispersants are block copolymers of polysiloxanes, alkylene oxide unsatd. **acid** esters, salt-**forming** group-contg. acrylate esters, and unsatd. compds. **Polymg.** **Light** Ester 130MA 33, HO-MS diester 33, and Light Ester HOP 33 parts in the presence of 1 part VPS 0501 gave a block copolymer (I). A mixt. of EtOH 40, TiO2 50, and 30% I in EtOH soln. 10 parts was dispersed at 50 rpm and filtered to give a paste showing viscosity 36.3 initially and 39.9 after 2 wk at 50.degree..

IT **158947-07-0**, VPS 0501

(acrylic polysiloxane block copolymers as dispersants for pigments for storage stability)

RN 158947-07-0 HCA

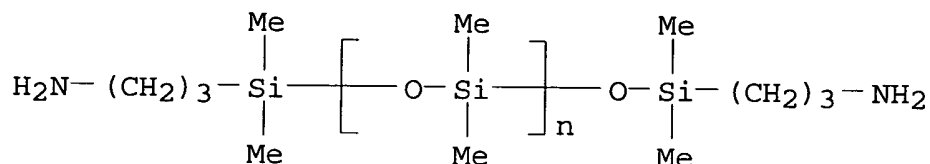
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

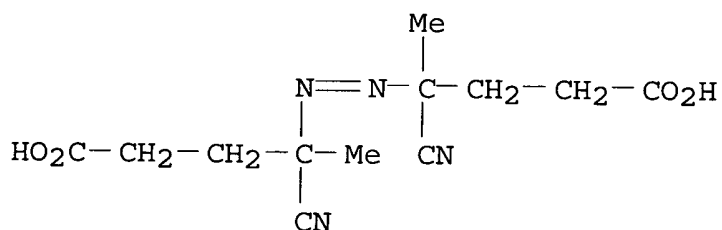
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C09D017-00

ICS C08G077-42; C09C003-10; C09D011-00

CC 42-6 (Coatings, Inks, and Related Products)

Section cross-reference(s): 46

IT 158947-07-0, VPS 0501

(acrylic polysiloxane block copolymers as dispersants for pigments for storage stability)

L14 ANSWER 15 OF 21 HCA COPYRIGHT 2003 ACS

127:34548 **Photopolymerization** of styrene with azo-containing polydimethylsiloxane as photoinitiator. Chang, Te-Chuan; Chen, Hon-Bin; Wu, Kuo-Hui (Department of Applied Chemistry, Chung Cheng Institute of Technology, Taoyuan, 33509, Taiwan). Polymer Journal (Tokyo), 29(5), 442-445 (English) 1997. CODEN: POLJB8. ISSN: 0032-3896. Publisher: Society of Polymer Science, Japan.

AB Azo-contg. poly(di-Me siloxane), prep'd. by condensation of bis(4-hydroxybutyl)-terminated poly(di-Me siloxane) with 4,4'-azobis-4-cyanopentanoyl chloride, was used as a photoinitiator for the bulk polymn. of styrene. The propagation and termination rate consts., and the fractions of primary radicals entering into termination were calcd. and compared with AIBN photoinitiation.

IT 181116-67-6P, 4,4'-Azobis(4-cyanopentanoyl chloride)-1,3-bis(4-hydroxybutyl)tetramethyldisiloxane-octamethylcyclotetrasiloxane copolymer

(photoinitiator for styrene bulk polymn.)

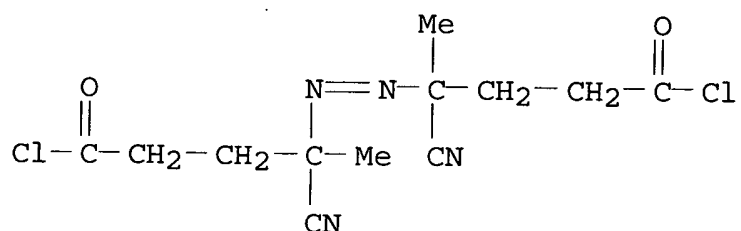
RN 181116-67-6 HCA

CN Pentanoyl chloride, 4,4'-azobis[4-cyano-, polymer with
octamethylcyclotetrasiloxane and 4,4'-(1,1,3,3-tetramethyl-1,3-
disiloxanediyl)bis[1-butanol] (9CI) (CA INDEX NAME)

CM 1

CRN 17170-81-9

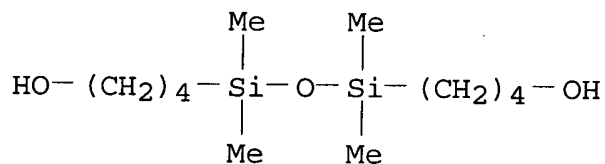
CMF C12 H14 C12 N4 O2



CM 2

CRN 5931-17-9

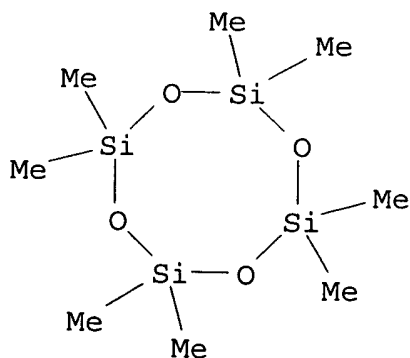
CMF C12 H30 O3 Si2



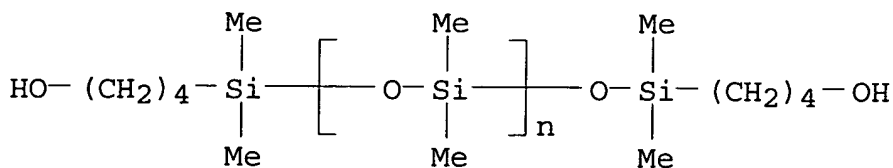
CM 3

CRN 556-67-2

CMF C8 H24 O4 Si4



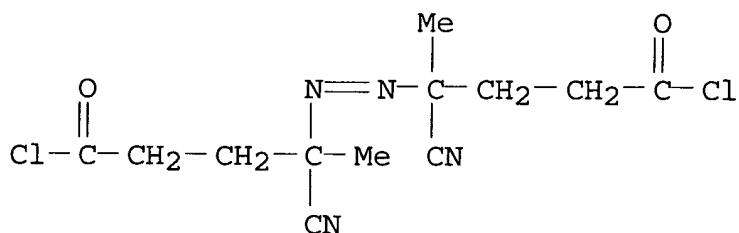
- CC 35-3 (Chemistry of Synthetic High Polymers)
IT Polymerization catalysts
(**photopolymn.**; kinetics of styrene bulk polymn. using
azo group-contg. polysiloxane as photoinitiator)
IT Polymerization kinetics
(**photopolymn.**; of styrene bulk polymn. using azo
group-contg. polysiloxane as photoinitiator)
IT **181116-67-6P**, 4,4'-Azobis(4-cyanopentanoyl
chloride)-1,3-bis(4-hydroxybutyl)tetramethyldisiloxane-
octamethylcyclotetrasiloxane copolymer
(photoinitiator for styrene bulk polymn.)
- L14 ANSWER 16 OF 21 HCA COPYRIGHT 2003 ACS
125:301658 **Photopolymerization** of methyl methacrylate with
azo-containing polydimethylsiloxane as photoinitiator: effect of
siloxane chain length. Chang, T. C.; Chen, H. B.; Chiu, Y. S.; Ho,
S. Y. (Dep. Appl. Chem., Chung Cheng Inst. Technol., Taoyuan, 33509,
Taiwan). Journal of Polymer Science, Part A: Polymer Chemistry,
34(16), 3313-3318 (English) 1996. CODEN: JPACEC. ISSN: 0887-624X.
Publisher: Wiley.
- AB The kinetics of the free radical **photopolymn.** of Me
methacrylate (MMA) initiated by azo-contg. polydimethylsiloxane
(PSMAI) and AIBN was investigated. The greater polymn. rate in
MMA/PSMAI systems may be due to the higher value of the initiation
rate and the lower value of the termination rate const. than that in
MMA/AIBN system. The reaction orders with respect to PSMAI
decreased with an increase in polydimethylsiloxane chain length
(SCL) in PSMAI. The obsd. deviations of the polymn. rate from the
rate equation could be explained in terms of primary radical
termination. The photoinitiator efficiency of the initiators
decreased with an increase in SCL, while the ratio of the rate
consts. for chain termination and chain initiation by primary
radical increased with SCL. The fraction of primary radicals
entering into termination in MMA/PSMAI systems was larger than that
in MMA/AIBN system.
- IT **183107-26-8P**
(siloxane chain length effect on **photopolymn.** of Me
methacrylate with azo-contg. dimethylsiloxane photoinitiator)
- RN 183107-26-8 HCA
CN Pentanoyl chloride, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(4-hydroxybutyl)dimethylsilyl]-.omega.-[[4-
hydroxybutyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI)
(CA INDEX NAME)
- CM 1
- CRN 165747-09-1
CMF (C2 H6 O Si)_n C12 H30 O3 Si2
CCI PMS



CM 2

CRN 17170-81-9

CMF C12 H14 Cl2 N4 O2



CC 35-3 (Chemistry of Synthetic High Polymers)

IT Chains, chemical

(length of; siloxane chain length effect on **photopolymn**
 . of Me methacrylate with azo-contg. dimethylsiloxane
 photoinitiator)

IT Kinetics of polymerization

Polymerization catalysts

(photochem., siloxane chain length effect on **photopolymn**
 . of Me methacrylate with azo-contg. dimethylsiloxane
 photoinitiator)

IT Siloxanes and Silicones, preparation

(polyester-, siloxane chain length effect on **photopolymn**
 . of Me methacrylate with azo-contg. dimethylsiloxane
 photoinitiator)

IT Polyesters, preparation

(siloxane-, siloxane chain length effect on **photopolymn**
 . of Me methacrylate with azo-contg. dimethylsiloxane
 photoinitiator)

IT 183107-26-8P

(siloxane chain length effect on **photopolymn**. of Me
 methacrylate with azo-contg. dimethylsiloxane photoinitiator)

IT 80-62-6, Methyl methacrylate

(siloxane chain length effect on **photopolymn**. of Me
 methacrylate with azo-contg. dimethylsiloxane photoinitiator)

IT 9011-14-7P, Pmma

(siloxane chain length effect on **photopolymn**. of Me
 methacrylate with azo-contg. dimethylsiloxane photoinitiator)

125:196481 **Photopolymerization** of methyl methacrylate with azo-containing polydimethylsiloxane as photoinitiator. Chang, T. C.; Chen, H. B.; Ho, S. Y.; Chiu, Y. S. (Dep. Appl. Chem., Chung Cheng Inst. Technol., Taichung, 33509, Peop. Rep. China). Journal of Macromolecular Science, Pure and Applied Chemistry, A33(9), 1263-1272 (English) 1996. CODEN: JSPCE6. ISSN: 1060-1325. Publisher: Dekker.

AB Azo-contg. polydimethylsiloxane (PDMS-ACP), prepd. by the polycondensation of hydroxybutyl-terminated polydimethylsiloxane with 4,4'-azobis-4-cyanopentanoyl chloride, was used as the photoinitiator for the polymn. of Me methacrylate (MMA) in bulk. Polymn. of MMA with AIBN as the photoinitiator was conducted for comparison. The propagation and termination rate consts. and the fraction of primary radicals entering into termination were evaluated. The termination rate const. 4.5 .times. 10⁷ mol.cntdot.L-1.cntdot.s-1 in the MMA/PDMS-ACP system was smaller than 9.1 .times. 10⁷ mol.cntdot.L-1.cntdot.s-1 for the MMA/AIBN system. The photoinitiator efficiency of PDMS-ACP was smaller than that of AIBN. The ratio of the rate consts. for chain termination and chain initiation by primary radicals were 7.9 .times. 10⁷ and 5.8 .times. 10⁷ for PDMS-ACP and AIBN, resp.

IT 181116-67-6P

(kinetics of **photopolymn.** of Me methacrylate in presence of azo-contg. polydimethylsiloxane as photoinitiator)

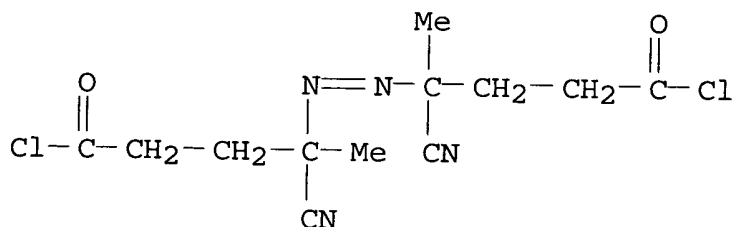
RN 181116-67-6 HCA

CN Pentanoyl chloride, 4,4'-azobis[4-cyano-, polymer with octamethylcyclotetrasiloxane and 4,4'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-butanol] (9CI) (CA INDEX NAME)

CM 1

CRN 17170-81-9

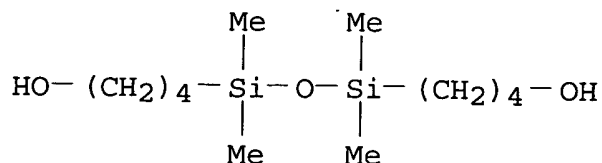
CMF C12 H14 Cl2 N4 O2



CM 2

CRN 5931-17-9

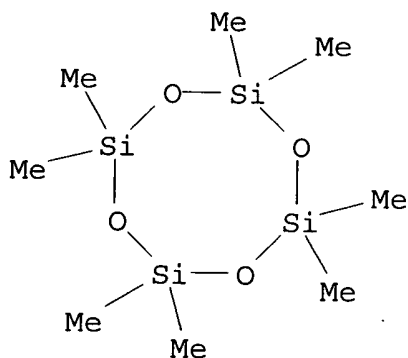
CMF C12 H30 O3 Si2



CM 3

CRN 556-67-2

CMF C8 H24 O4 Si4



- CC 35-3 (Chemistry of Synthetic High Polymers)
- IT Kinetics of polymerization
Polymerization catalysts
(photochem., kinetics of **photopolymn.** of Me methacrylate in presence of azo-contg. polydimethylsiloxane as photoinitiator)
- IT Siloxanes and Silicones, uses
(polyester-, azo-contg.; kinetics of **photopolymn.** of Me methacrylate in presence of azo-contg. polydimethylsiloxane as photoinitiator)
- IT Polyesters, uses
(siloxane-, azo-contg.; kinetics of **photopolymn.** of Me methacrylate in presence of azo-contg. polydimethylsiloxane as photoinitiator)
- IT 181116-67-6P
(kinetics of **photopolymn.** of Me methacrylate in presence of azo-contg. polydimethylsiloxane as photoinitiator)
- IT 80-62-6, Methyl methacrylate
(kinetics of **photopolymn.** of Me methacrylate in presence of azo-contg. polydimethylsiloxane as photoinitiator)
- L14 ANSWER 18 OF 21 HCA COPYRIGHT 2003 ACS
124:118370 Manufacture of azo-containing polymers as radical polymerization initiators. Sugiura, Yoshihiko (Tosoh Corp, Japan).

Jpn. Kokai Tokkyo Koho JP 07278297 A2 19951024 Heisei, 7 pp.
(Japanese)., CODEN: JKXXAF. APPLICATION: JP 1994-77060 19940415.

AB The process comprises polycondensing azo components having
(R₄)_mR₁2CN:NCR₁2(R₄)_m (R₁ = H, C1-6 linear or branched alkyl,
nitrile; R₄ = linear or branched divalent hydrocarbons; m = 0,1) and
organopolysiloxanes R₃R₂2SiO(SiOR₂)_nSiR₂2R₃ (R₂ = H,
halo-(un)substituted alkyl or Ph; R₃ = linear or branched divalent
hydrocarbons, alkylene glycols; n = 10-500) to form amide or ester
bonds and purifying the azo polymers using lower alcs. Thus, X
22-161C 90, triethylamine 4.1, and 4,4'-azobiscyanopentanoic acid
chloride 6.3 g were mixed for 2 h at room temp. and purified with
MeOH to give a polymer showing no triethylamine hydrochloride peak
in NMR spectra.

IT 158271-34-2P 158947-07-0P

(manuf. of azo-contg. polymers as radical polymn. initiators)

RN 158271-34-2 HCA

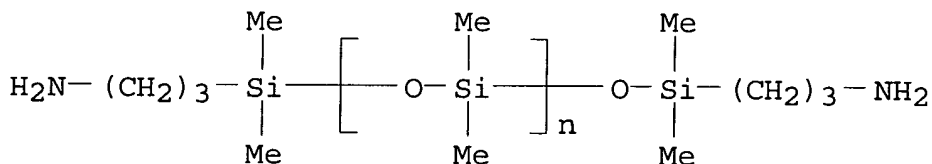
CN Pentanoyl chloride, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA
INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

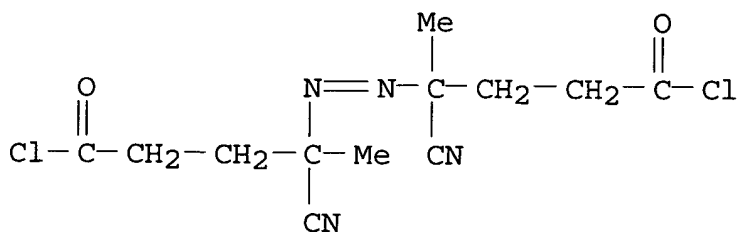
CCI PMS



CM 2

CRN 17170-81-9

CMF C12 H14 Cl2 N4 O2



RN 158947-07-0 HCA

CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-

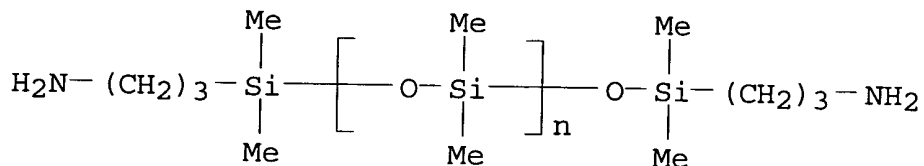
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA
INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

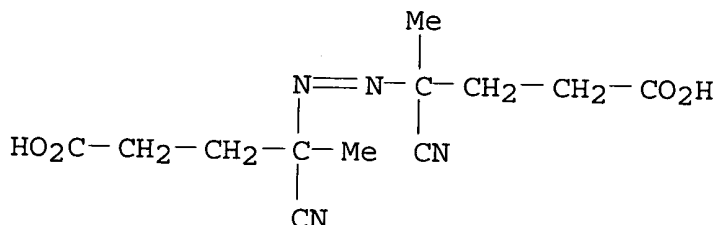
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C08G069-42

ICS C08F004-04; C08G063-685; C08G063-90; C08G069-46

CC 35-8 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 37, 38

IT 2638-94-0DP, 4,4'-Azobis(4-cyanopentanoic acid), reaction products with polydimethylsiloxanes both-terminated phenols 9016-00-6DP, Dimethyl siloxane, hydroxylphenyl-terminated, reaction products with azo compds. 158271-34-2P

158947-07-0P 173176-28-8P

(manuf. of azo-contg. polymers as radical polymn. initiators)

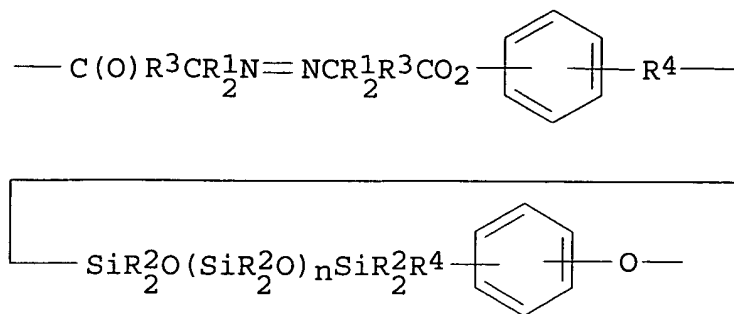
L14 ANSWER 19 OF 21 HCA COPYRIGHT 2003 ACS

123:170628 Azo group-containing polymers and their manufacture.

Sugiura, Yoshihiko; Myaki, Yoshuki (Tosoh Corp., Japan). Jpn. Kokai Tokkyo Koho JP 07025998 A2 19950127 Heisei, 8 pp. (Japanese).

CODEN: JKXXAF. APPLICATION: JP 1994-60698 19940330. PRIORITY: JP 1993-109254 19930511.

GI



I

AB The title radical-polymerizable azo group-contg. polymers with no. av. mol. wt. (Mn) 2000-500,000 contg. repeating units I [R1 = H, lower alkyl, nitrile; R2 = H, halogen, (substituted) alkyl, Ph; R3-4 = C0-24 (branched) divalent hydrocarbon group; n = 0-500 integral no.], useful for block copolymn., are manufd. by polycondensation of raw materials mainly composed of .gtoreq.2 phenolic OH-contg. organopolysiloxanes and azo group-contg. dicarboxylic acids or their acid halides. Thus, dissolving 8.4 g toluenesulfonic acid chloride in 20 mL dichloromethane (II), adding 10 mL pyridine, stirring, adding 5 mL DMF, stirring, mixing with 5.6 g 4,4'-azobis(4-cyanopentanoic acid) dispersed in 100 mL II, stirring at room temp., mixing with 67 g .alpha.,.omega.-bis[2-(p-hydroxyphenyl)ethyl]polydimethylsiloxane dissolved in 20 mL II, reacting at room temp. for 5 h, filtering, washing by MeOH, and evapg. gave 63 g azo group-contg. polydimethylsiloxane ester with Mn 2400, no. av. mol. wt. 47,000, viscosity 2000 P, and heat decompn. temp. 390.degree. in yield 88%.

IT 166595-49-9P
(azo group-contg. polyorganosiloxanes with radical polymerizability)

RN 166595-49-9 HCA

CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[[2-(4-hydroxyphenyl)ethyl]dimethylsilyl]-.omega.-[[[2-(4-hydroxyphenyl)ethyl]dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA INDEX NAME)

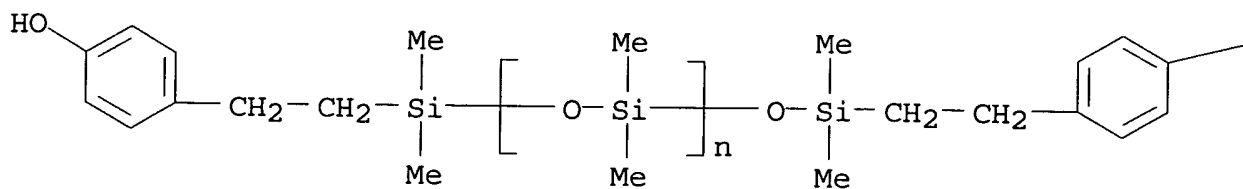
CM 1

CRN 158133-96-1

CMF (C2 H6 O Si)n C20 H30 O3 Si2

CCI PMS

PAGE 1-A



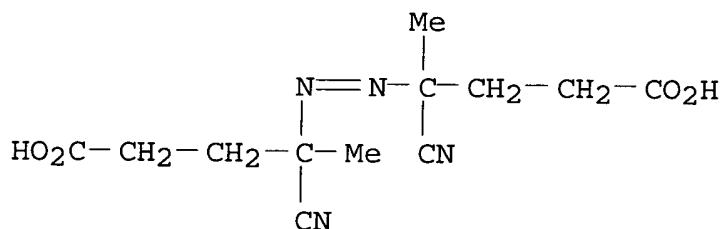
PAGE 1-B

—OH

CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C08G063-685

ICS C08F004-04; C08G063-695; C08G063-82; C08G077-445

CC 35-5 (Chemistry of Synthetic High Polymers)

IT 2638-94-0DP, 4,4'-Azobis(4-cyanopentanoic acid), reaction products with 2-(p-hydroxyphenyl)ethyl-terminated polydimethylsiloxane 31900-57-9DP, Dimethylsilanediol homopolymer, 2-(p-hydroxyphenyl)ethyl-terminated, polymer with 4,4'-azobis(4-cyanopentanoic acid) **166595-49-9P** (azo group-contg. polyorganosiloxanes with radical polymerizability)

L14 ANSWER 20 OF 21 HCA COPYRIGHT 2003 ACS

122:32392 Introducing azo groups by reacting azo compounds with amino, hydroxy or carboxy compounds. Sugiura, Yoshihiko; Myaki, Yoshuki (Tosoh Corp, Japan). Jpn. Kokai Tokkyo Koho JP 06116226 A2 19940426 Heisei, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-271584 19921009.

AB The title process for obtaining azo compds. useful for radical block copolymn. is carried out using 1,1'-carbonyldiimidazole as condensing agent for high yield. 4,4'-Azobis(4-cyanopentanoic acid) in dichloromethane was treated with 1,1'-carbonyldiimidazole with

evolution of CO₂ then treated with X-22-161B (mol. wt. 3000) for 5 h to obtain an amide group-contg. product with Mw 120,000.

IT 159412-10-9P

(introducing azo groups by reacting azo compds. with amino, hydroxy or carboxy compds.)

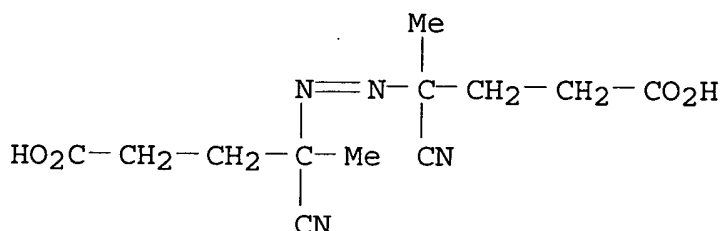
RN 159412-10-9 HCA

CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with dimethylsilanediol, block (9CI) (CA INDEX NAME)

CM 1

CRN 2638-94-0

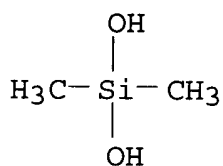
CMF C12 H16 N4 O4



CM 2

CRN 1066-42-8

CMF C2 H8 O2 Si



IC ICM C07C255-66

ICS C07C245-00; C08F008-30; C08G085-00

CC 35-8 (Chemistry of Synthetic High Polymers)

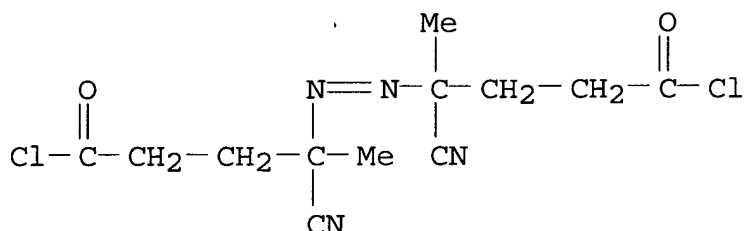
IT 2638-94-0DP, 4,4'-Azobis(4-cyanopentanoic acid), reaction products with amino group-contg. silica gel

159412-10-9P 159412-11-0P 159412-12-1P 159940-35-9DP, Wakosil 5NH₂, reaction products with azobis(cyanopentanoic acid) (introducing azo groups by reacting azo compds. with amino, hydroxy or carboxy compds.)

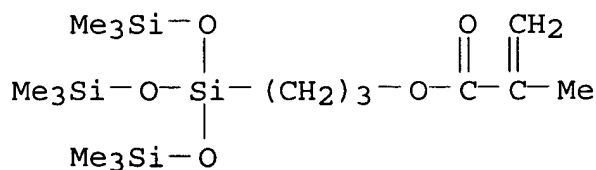
L14 ANSWER 21 OF 21 HCA COPYRIGHT 2003 ACS

121:10235 Block copolymers with siloxy side chains and their manufacture. Noguchi, Takeshi; Mise, Tsuyoshi; Inoe, Hiroshi; Ueda, Akira (Showa Highpolymer, Japan; Osaka City). Jpn. Kokai Tokkyo Koho JP 06016756 A2 19940125 Heisei, 14 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-143337 19920509.

CRN 17170-81-9
CMF C12 H14 Cl2 N4 O2



CRN 17096-07-0
CMF C16 H38 O5 Si4



CM 3

CRN 629-11-8
CMF C6 H14 O2

HO-(CH₂)₆-OH

IC ICM C08F299-08
ICS C08F004-04; C08F030-08; C08G063-68; C08G069-42; C08G069-48
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 37, 38
IT Polyesters, **preparation**
(azobiscyanopentanoic acid-contg., **prepn.** of,
as macromol. radical initiators for **prepn.** of block copolymers
with silicone side chains)
IT 629-11-8DP, 1,6-Hexanediol, block copolymers with
4,4'-azobis(4-cyanopentanoyl chloride) and unsatd. siloxanes
17170-81-9DP, 4,4'-Azobis(4-cyanopentanoyl chloride), block
copolymers with 1,6-hexanediol and siloxane macromonomers
155721-34-9P, 4,4'-Azobis(4-cyanopentanoyl
chloride)-1,6-hexanediol-[3-(methacryloyloxy)propyl]tris(trimethylsi
loxy)silane block copolymer
(**prepn.** of, as prepolymer for **prepn.** of block copolymers with
silicone side chains)

=> d 116 1-27 ti

L16 ANSWER 1 OF 27 HCA COPYRIGHT 2003 ACS
TI Water-repellent oil-repellent coating **composition**
containing silicone-acrylic block copolymer

L16 ANSWER 2 OF 27 HCA COPYRIGHT 2003 ACS
TI Antifouling coating **compositions** and their films

L16 ANSWER 3 OF 27 HCA COPYRIGHT 2003 ACS
TI Electrically conductive coating **composition** with excellent
durability and toner-releasing property

L16 ANSWER 4 OF 27 HCA COPYRIGHT 2003 ACS
TI Conductive **composition** and conductive roller for
electrophotographic applications

L16 ANSWER 5 OF 27 HCA COPYRIGHT 2003 ACS
TI Acrylic polymer adhesive **composition** for polarizing plate

L16 ANSWER 6 OF 27 HCA COPYRIGHT 2003 ACS
TI Curable silicone-acrylic block copolymer **compositions** for
water-repellent coatings

L16 ANSWER 7 OF 27 HCA COPYRIGHT 2003 ACS
TI Water-thinned coating **compositions** and glass bottles

coated therewith with good alkali resistance

- L16 ANSWER 8 OF 27 HCA COPYRIGHT 2003 ACS
TI Conductive **composition** and conductive roll made from the same
- L16 ANSWER 9 OF 27 HCA COPYRIGHT 2003 ACS
TI Curable fluoropolymer **compositions** and their scratch-resistant cured products
- L16 ANSWER 10 OF 27 HCA COPYRIGHT 2003 ACS
TI Polysiloxane-containing coating **compositions** with good resistance to chipping and scratching
- L16 ANSWER 11 OF 27 HCA COPYRIGHT 2003 ACS
TI Curable resin coating **compositions** with good release property and water and oil repellency
- L16 ANSWER 12 OF 27 HCA COPYRIGHT 2003 ACS
TI Curable resin **compositions** for water-repellent coatings and coated products therefrom
- L16 ANSWER 13 OF 27 HCA COPYRIGHT 2003 ACS
TI Electroconductive **composition** for electroconductive roll of electrophotographic apparatus
- L16 ANSWER 14 OF 27 HCA COPYRIGHT 2003 ACS
TI Water- and oil-repellent coating **compositions** and surfaces coated with them
- L16 ANSWER 15 OF 27 HCA COPYRIGHT 2003 ACS
TI Water- and oil-repellent, cold-curable polyorganosiloxane block copolymer **composition**, production thereof and base material coated with the same
- L16 ANSWER 16 OF 27 HCA COPYRIGHT 2003 ACS
TI Wrinkle reducing **composition** for fabrics
- L16 ANSWER 17 OF 27 HCA COPYRIGHT 2003 ACS
TI Olefin polymer, process for manufacturing the same, curable resin **composition**, and antireflection coating
- L16 ANSWER 18 OF 27 HCA COPYRIGHT 2003 ACS
TI Curable epoxy-containing block polysiloxane **compositions** and transparent substrates coated with them
- L16 ANSWER 19 OF 27 HCA COPYRIGHT 2003 ACS
TI Stain-resistant water-based paint **composition**
- L16 ANSWER 20 OF 27 HCA COPYRIGHT 2003 ACS
TI Storage-stable and re-coatable aqueous coating **compositions**

- L16 ANSWER 21 OF 27 HCA COPYRIGHT 2003 ACS
TI Curable resin **compositions** for water-repellent coatings
- L16 ANSWER 22 OF 27 HCA COPYRIGHT 2003 ACS
TI Personal care **compositions** comprising a
silicone-containing adhesive copolymer
- L16 ANSWER 23 OF 27 HCA COPYRIGHT 2003 ACS
TI Polydimethylsiloxane **compositions** as antisticking agents
and thermal transfer recording films
- L16 ANSWER 24 OF 27 HCA COPYRIGHT 2003 ACS
TI Scratch-resistant coating **compositions** and decorative
sheets therefrom
- L16 ANSWER 25 OF 27 HCA COPYRIGHT 2003 ACS
TI Silicone-vinyl type block copolymers, their manufacture and
compositions
- L16 ANSWER 26 OF 27 HCA COPYRIGHT 2003 ACS
TI Vinyl chloride polymer **compositions**
- L16 ANSWER 27 OF 27 HCA COPYRIGHT 2003 ACS
TI Matte anionic electrophoretic coating **compositions**

=> d l16 2,3,4,7,8,10,11,12,13,14,15,20,21,22,23,24 cbib abs hitstr hitind

- L16 ANSWER 2 OF 27 HCA COPYRIGHT 2003 ACS
138:14745 Antifouling coating **compositions** and their films.
Hamade, Ryoji; Harada, Akio; Yamamori, Naoki (Nippon Paint Co.,
Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002348536 A2 20021204, 10
pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-158892
20010528.
- AB Title compns. contain room-temp.-curable silicone rubbers and
silicone-vinyl block copolymers prep'd. by polyng. ethylenic unsatd.
compds. in the presence of azo group-contg. silicone macro
initiators. Polyng. Me methacrylate and 2-ethylhexyl acrylate in
the presence of VPS 0501 gave a block copolymer-contg. varnish,
which was mixed with YF 3057, methyltri(methylethylketoxime)silane,
vinyltri(methylethylketoxime)silane, and additives to form a coating
(A). An epoxy compn.-primed steel plate was sprayed with the above
A and cure at room temp. over 1 wk to form a plate resulting no
microorganism attachment over 6 mo.
- IT 477638-57-6P, 2-Ethylhexyl acrylate-methyl
methacrylate-4,4'-azobis(4-cyanopentanoic acid)-.alpha.,.omega.-
diaminopropylpoly(dimethylsiloxane) block copolymer
477638-62-3P, 2-Ethylhexyl acrylate-2-hydroxyethyl
methacrylate-methyl methacrylate-4,4'-azobis(4-cyanopentanoic
acid)-.alpha.,.omega.-diaminopropylpoly(dimethylsiloxane) block
copolymer
(vinyl-silicone block copolymer- and room-temp.-curable silicone

rubber-contg. antifouling coatings)

RN 477638-57-6 HCA

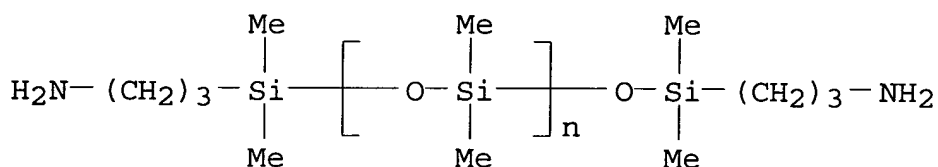
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[(3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],
 2-ethylhexyl 2-propenoate and methyl 2-methyl-2-propenoate, block
 (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

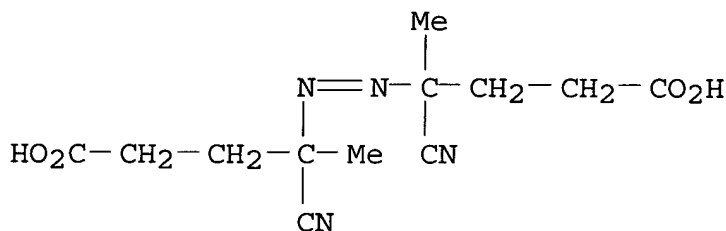
CCI PMS



CM 2

CRN 2638-94-0

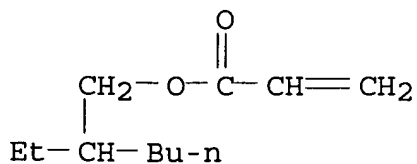
CMF C12 H16 N4 O4



CM 3

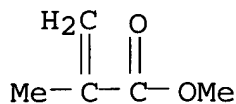
CRN 103-11-7

CMF C11 H20 O2



CM 4

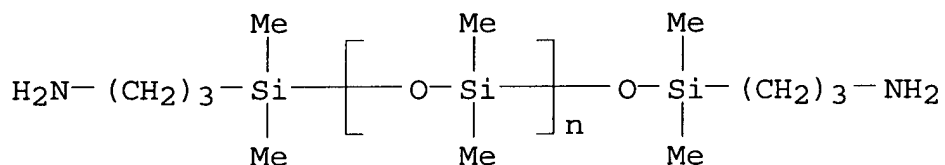
CRN 80-62-6
CMF C5 H8 O2



RN 477638-62-3 HCA
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],
2-ethylhexyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and
methyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

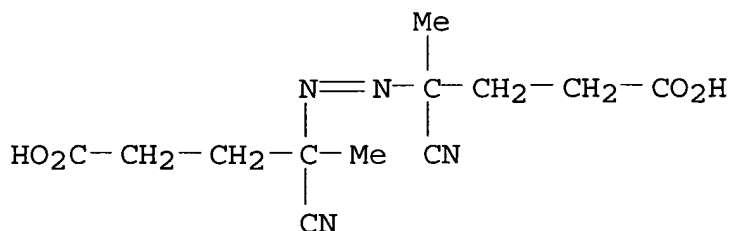
CM 1

CRN 97917-34-5
CMF (C2 H6 O Si)_n C10 H28 N2 O Si2
CCI PMS



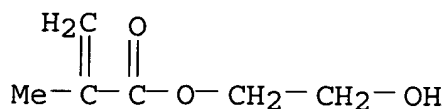
CM 2

CRN 2638-94-0
CMF C12 H16 N4 O4



CM 3

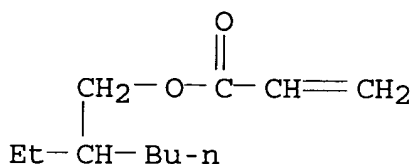
CRN 868-77-9
CMF C6 H10 O3



CM 4

CRN 103-11-7

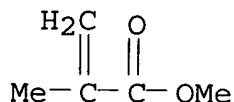
CMF C11 H20 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



IC ICM C09D183-10

ICS C09D005-16; C09D153-00; C09D183-04; E02B001-00; C09D151-08

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 39

IT **477638-57-6P**, 2-Ethylhexyl acrylate-methyl methacrylate-4,4'-azobis(4-cyanopentanoic acid)-.alpha.,.omega.-diaminopropylpoly(dimethylsiloxane) block copolymer
477638-62-3P, 2-Ethylhexyl acrylate-2-hydroxyethyl methacrylate-methyl methacrylate-4,4'-azobis(4-cyanopentanoic acid)-.alpha.,.omega.-diaminopropylpoly(dimethylsiloxane) block copolymer

(vinyl-silicone block copolymer- and room-temp.-curable silicone rubber-contg. antifouling coatings)

L16 ANSWER 3 OF 27 HCA COPYRIGHT 2003 ACS

137:280709 Electrically conductive coating **composition** with excellent durability and toner-releasing property. Arimura, Shoji; Okuda, Hirofumi; Takeda, Kazuhiro (Tokai Rubber Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002284949 A2 20021003, 14 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-88963 20010327.

AB Title compn., suitable for electrophotog. developing rollers,

comprises (A) an azo group-contg. silicone polymer-acrylic monomer block-copolymer as an essential component, (B) a fluorinated olefin resin, and (C) an elec. conductor. Thus, a Bu acrylate-2-hydroxyethyl methacrylate-Me methacrylate-VPS 0501 block copolymer 50 parts was admixed with Kynar 7201 50 parts and Denka Black HS 100 10 parts to give an elec. conductive surface coating, showing excellent toner filmability, copying image quality, and durability.

IT 278595-29-2P, Butyl acrylate-2-hydroxyethyl methacrylate-methyl methacrylate-VPS 0501 block copolymer 464173-38-4P 464173-39-5P
(manuf. of elec. conductive coating compn. having azo group-contg. silicone polymer-acrylic monomer block-copolymer)

RN 278595-29-2 HCA

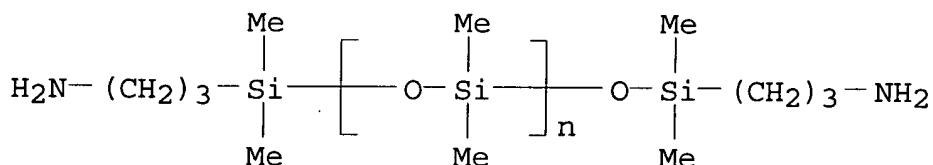
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

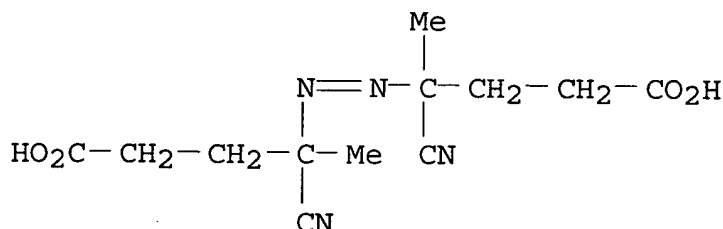
CCI PMS



CM 2

CRN 2638-94-0

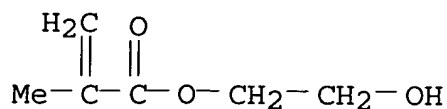
CMF C12 H16 N4 O4



CM 3

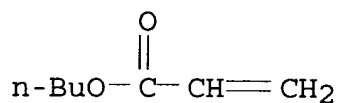
CRN 868-77-9

CMF C6 H10 O3



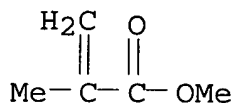
CM 4

CRN 141-32-2
CMF C7 H12 O2



CM 5

CRN 80-62-6
CMF C5 H8 O2



RN 464173-38-4 HCA

CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[(3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], Burnock
DN 955, butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and
methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

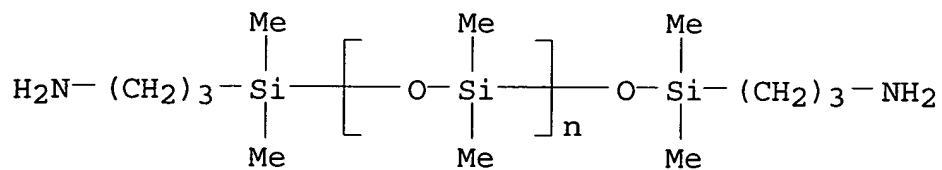
CM 1

CRN 122302-78-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

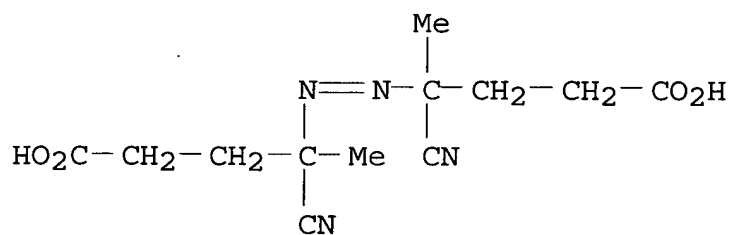
CRN 97917-34-5
CMF (C2 H6 O Si)n C10 H28 N2 O Si2
CCI PMS



CM 3

CRN 2638-94-0

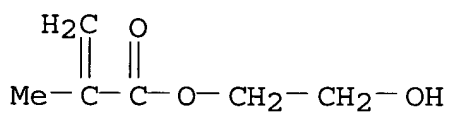
CMF C12 H16 N4 O4



CM 4

CRN 868-77-9

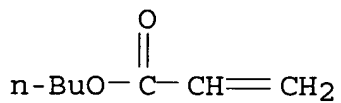
CMF C6 H10 O3



CM 5

CRN 141-32-2

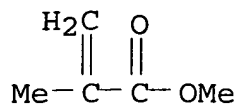
CMF C7 H12 O2



CM 6

CRN 80-62-6

CMF C5 H8 O2



RN 464173-39-5 HCA

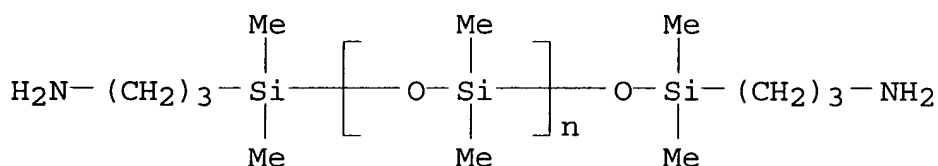
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl
 2-propenoate, formaldehyde, 2-hydroxyethyl 2-methyl-2-propenoate,
 methyl 2-methyl-2-propenoate and 1,3,5-triazine-2,4,6-triamine (9CI)
 (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

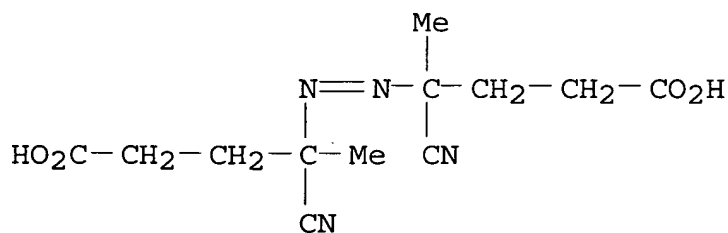
CCI PMS



CM 2

CRN 2638-94-0

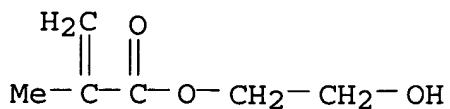
CMF C12 H16 N4 O4



CM 3

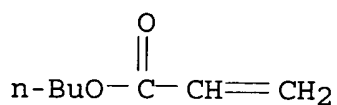
CRN 868-77-9

CMF C6 H10 O3



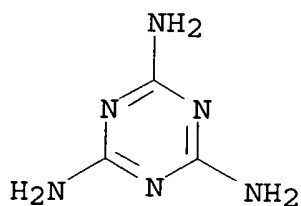
CM 4

CRN 141-32-2
 CMF C7 H12 O2



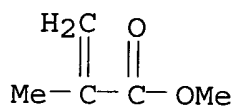
CM 5

CRN 108-78-1
 CMF C3 H6 N6



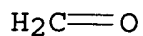
CM 6

CRN 80-62-6
 CMF C5 H8 O2



CM 7

CRN 50-00-0
 CMF C H2 O



IC ICM C08L027-12
 ICS C08F004-04; C08G077-442; C08K003-00; F16C013-00; G03G015-02;
 G03G015-08; G03G015-16; H01B001-20
 CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 74, 76

IT 278595-29-2P, Butyl acrylate-2-hydroxyethyl methacrylate-methyl methacrylate-VPS 0501 block copolymer 464173-38-4P 464173-39-5P
(manuf. of elec. conductive coating compn. having azo group-contg. silicone polymer-acrylic monomer block-copolymer)

L16 ANSWER 4 OF 27 HCA COPYRIGHT 2003 ACS

137:279962 Conductive **composition** and conductive roller for electrophotographic applications. Arimura, Shoji; Okuda, Hirofumi; Takeda, Kazuhiro (Tokai Rubber Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002284981 A2 20021003, 14 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-83361 20010322.

AB Title compn. comprises (A) a polyurethane elastomer, (B) a block copolymer contg. blocks derived from a silicone polymer contg. azo group and blocks derived from acrylic monomers, (C) a conductive substance, and (D) a crosslinker. Thus a conductive compn. was formulated by mixing 100 parts of a polyurethane rubber, 30 parts of a block copolymer obtained by the reaction of azo group-contg. polysiloxane VPS 0501 with Me methacrylate, Bu acrylate, and 2-hydroxyethyl methacrylate, 15 parts of conductive carbon black, and 20 parts of polyisocyanate crosslinker Burnock DN 950; the compn. was used as surface layer in making a conductive roller. A conductive roller for electrophotog. applications is also claimed.

IT 278595-29-2
(conductive compn. and conductive roller for electrophotog. applications)

RN 278595-29-2 HCA

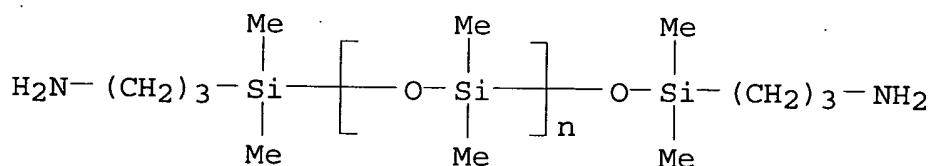
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

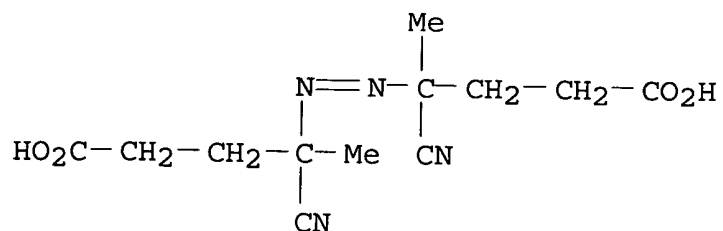
CCI PMS



CM 2

CRN 2638-94-0

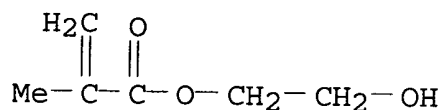
CMF C12 H16 N4 O4



CM 3

CRN 868-77-9

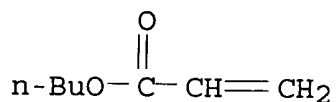
CMF C6 H10 O3



CM 4

CRN 141-32-2

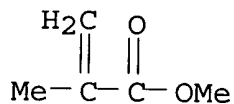
CMF C7 H12 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



IC ICM C08L075-04

ICS C08K003-06; F16C013-00; G03G015-02; G03G015-08; G03G015-16;
H01B001-20; C08L075-04; C08L051-08; C08L061-20

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 39, 74

IT 278595-29-2

(conductive compn. and conductive roller for electrophotog.
applications)

L16 ANSWER 7 OF 27 HCA COPYRIGHT 2003 ACS

135:345899 Water-thinned coating **compositions** and glass bottles coated therewith with good alkali resistance. Suzuki, Takehiro; Oizumi, Tetsuro (Toyo Ink Mfg. Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001302876 A2 20011031, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-121913 20000424.

AB The compns. comprise (A) copolymers prepd. by polymn. of (a) OH-contg. unsatd. monomers, (b) carboxyl-contg. unsatd. monomers, (c) other monomers, and optionally (d) polyorganosiloxane-contg. unsatd. monomers and (partially) neutralizing with (e) basic compds., (B) compds. having .gtoreq.1 carboxyl group and .gtoreq.2 blocked isocyanates (disso.cn. temp. of blocking agent 100-250.degree.) neutralized with (e) basic compds., (C) epoxy compds., and (D) water. Thus, a coating compn. contg. (A) acrylic acid-Et acrylate-2-hydroxyethyl methacrylate-Me methacrylate copolymer ammonium salt, (B) Bayhydur BL 5140 (blocked polyisocyanate), (C) Denacol EX 313 (glycerol polyglycidyl ether), (D) water, and pigment dispersion was applied on a glass plate and baked to give a test piece showing good scratch resistance.

IT 158947-07-0, VPS 0501

(polymn. catalyst; water-thinned coating compns. for glass bottles with good alkali resistance)

RN 158947-07-0 HCA

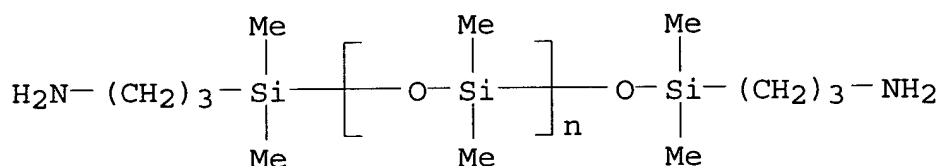
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

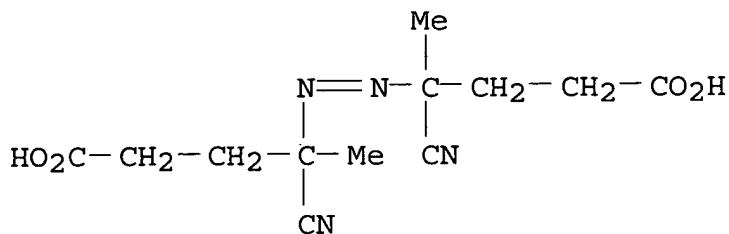
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C08L057-10
 ICS C03C017-32; C08F004-04; C08F246-00; C08G018-32; C08G059-40;
 C08K003-20; C08L063-00; C08L075-04; C09D143-04; C09D163-00;
 C09D175-04; C09D183-10

CC 42-7 (Coatings, Inks, and Related Products)

IT 158947-07-0, VPS 0501
 (polymn. catalyst; water-thinned coating compns. for glass
 bottles with good alkali resistance)

L16 ANSWER 8 OF 27 HCA COPYRIGHT 2003 ACS

135:289569 Conductive **composition** and conductive roll made
 from the same. Arimura, Shoji; Yoshikawa, Hitoshi; Kaji, Akihiko
 (Tokai Rubber Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP
 2001279050 A2 20011010, 13 pp. (Japanese). CODEN: JKXXAF.
 APPLICATION: JP 2000-89649 20000328.

AB The compn. for prepn. of surface layer of conductive rolls comprises
 a structure of siloxane contg. azo group; a structure of acrylic
 monomer; and an aminoplast. Thus, a soln. for coating of conductive
 rolls was made from a block copolymer of VPS 0501, MMA, Bu acrylate,
 and 2-hydroxyethyl methacrylate contg. Super-Beckamine J 820-60 25
 and carbon black 10 phr.

IT 158947-07-0, VPS 0501
 (conductive compn. and conductive roll made from the same)

RN 158947-07-0 HCA

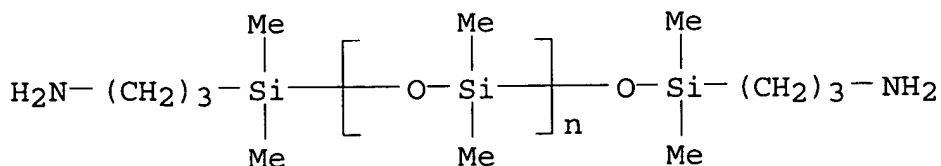
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA
 INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

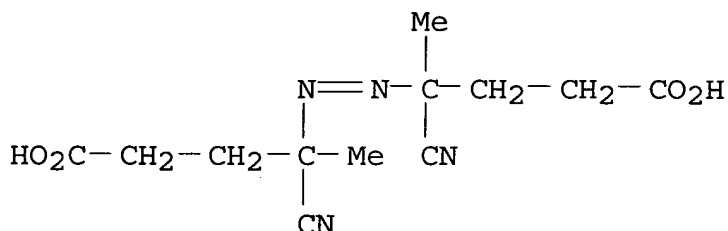
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C08L051-08

ICS C08F283-12; C08L061-20; F16C013-00; G03G015-02; G03G015-08;
G03G015-16

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 42, 74

IT 158947-07-0, VPS 0501

(conductive compn. and conductive roll made from the same)

L16 ANSWER 10 OF 27 HCA COPYRIGHT 2003 ACS

134:117225 Polysiloxane-containing coating **compositions** with good resistance to chipping and scratching. Kawakami, Susumu; Ohno, Tomihisa; Fujii, Kozo (Natoco Paint K. K., Japan). Jpn. Kokai Tokkyo Koho JP 2001011376 A2 20010116, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-188629 19990702.

AB The compns. comprise polydimethyl siloxane block or graft copolymers, polycaprolactone compds. and polysiloxanes and are crosslinked with isocyanate or melamine type crosslinkers when used on a surface such as plastic for good protection. Thus, heating VPS-0501 (polysiloxane initiator) 20 with Me methacrylate 30, Bu methacrylate 26, 2-hydroxyethyl methacrylate 23, and methacrylic acid 1 part in PhMe contg. 1-thioglycerin gave a block copolymer, 75 parts of which was combined with a polycondensate of tetraethoxysilane 10, Placel 308 (polycaprolactone triol) 16 and HMDI isocyanurate 36 parts, coated on a glass surface and dried at 60.degree. for 1 h to give a film with good resistance to water, chem. weather, chipping and scratching.

IT 320600-75-7P, Butyl methacrylate-ethyl silicate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-Placel 308-Takenate D 170N-VPS 0501 block copolymer 320600-77-9DP, Butyl methacrylate-ethyl silicate-HMDI trimer-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-Placel 308-VPS-0501 block copolymer, trimethylsilyl ether

(polysiloxane-contg. coating compns. with resistance to chipping and scratching)

RN 320600-75-7 HCA

CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with

.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 2-methyl-2-propenoic acid, Placel 308, silicic acid ethyl ester and Takenate D 170N, block (9CI) (CA INDEX NAME)

CM 1

CRN 120860-41-5

CMF Unspecified

CCI MAN

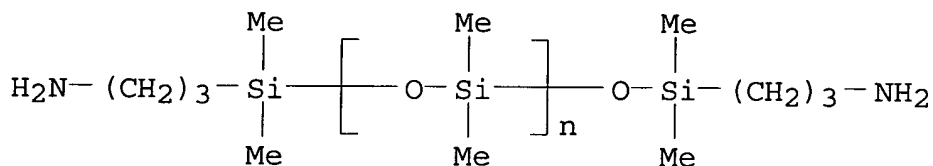
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS



CM 3

CRN 95918-32-4

CMF Unspecified

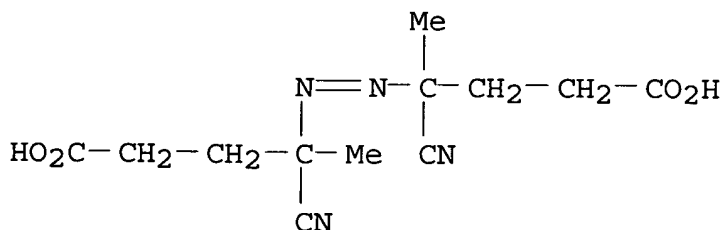
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

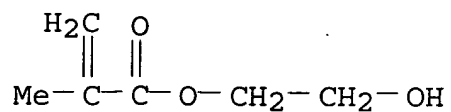
CRN 2638-94-0

CMF C12 H16 N4 O4



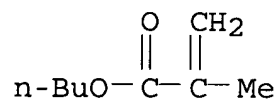
CM 5

CRN 868-77-9
CMF C6 H10 O3



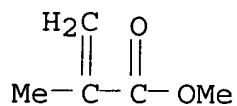
CM 6

CRN 97-88-1
CMF C8 H14 O2



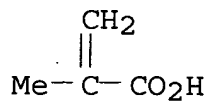
CM 7

CRN 80-62-6
CMF C5 H8 O2



CM 8

CRN 79-41-4
CMF C4 H6 O2



CM 9

CRN 11099-06-2
CMF C2 H6 O . x Unspecified

CM 10

CRN 1343-98-2
CMF Unspecified

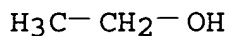
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 11

CRN 64-17-5

CMF C2 H6 O



RN 320600-77-9 HCA

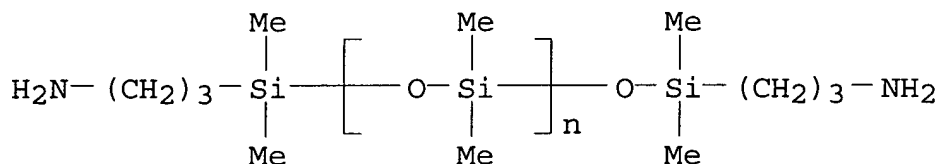
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl
 2-methyl-2-propenoate, 1,6-diisocyanatohexane trimer, 2-hydroxyethyl
 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate,
 2-methyl-2-propenoic acid, Placel 308 and silicic acid ethyl ester,
 block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS



CM 2

CRN 95918-32-4

CMF Unspecified

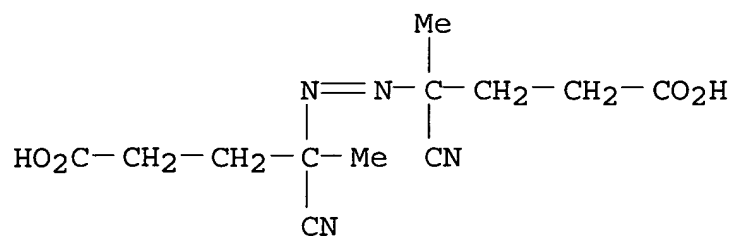
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

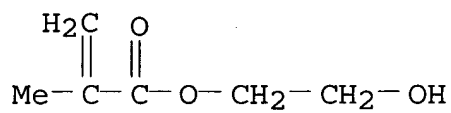
CRN 2638-94-0

CMF C12 H16 N4 O4



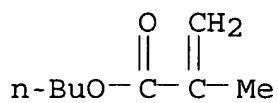
CM 4

CRN 868-77-9
 CMF C6 H10 O3



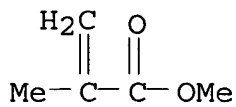
CM 5

CRN 97-88-1
 CMF C8 H14 O2



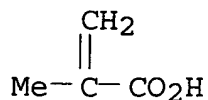
CM 6

CRN 80-62-6
 CMF C5 H8 O2



CM 7

CRN 79-41-4
 CMF C4 H6 O2

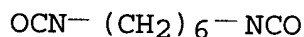


CM 8

CRN 28574-90-5
 CMF (C8 H12 N2 O2)3
 CCI PMS

CM 9

CRN 822-06-0
 CMF C8 H12 N2 O2



CM 10

CRN 11099-06-2
 CMF C2 H6 O . x Unspecified

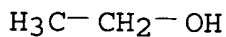
CM 11

CRN 1343-98-2
 CMF Unspecified
 CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 12

CRN 64-17-5
 CMF C2 H6 O



IC ICM C09D183-04
 CC 42-10 (Coatings, Inks, and Related Products)
 IT 320580-56-1P, Burnock DN 950-butyl methacrylate-2-hydroxyethyl
 methacrylate-methacrylic acid-methyl methacrylate-Placel
 410D-silica-X 22-174DX graft copolymer 320580-57-2P 320580-59-4P
 320580-62-9P 320580-65-2P 320580-67-4P 320580-69-6P
 320580-70-9P 320580-72-1P 320580-73-2P 320580-74-3P
 320580-75-4DP, trimethylsilyl ether 320580-78-7P 320580-79-8DP,
 trimethylsilyl ether 320580-81-2P 320580-84-5P 320580-86-7P
 320580-89-0DP, trimethylsilyl ether 320580-91-4P 320580-94-7DP,

trimethylsilyl ether 320580-97-0P 320600-75-7P, Butyl methacrylate-ethyl silicate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-Placel 308-Takenate D 170N-VPS 0501 block copolymer 320600-76-8P, Ethyl silicate-2-hydroxyethyl methacrylate-methyl methacrylate-methacrylic acid-Placel FM 5-Takenate D 170N-X 22-174DX graft copolymer 320600-77-9DP, Butyl methacrylate-ethyl silicate-HMDI trimer-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-Placel 308-VPS-0501 block copolymer, trimethylsilyl ether 320600-78-0P, Ethyl silicate-HMDI trimer-2-hydroxyethyl methacrylate-methyl methacrylate-methacrylic acid-Placel FM 5-X 22-174DX graft copolymer 320600-79-1P, Caprolactone-dimethylsilanediol-ethyl silicate-2-hydroxyethyl methacrylate-methyl methacrylate-methacrylic acid-Takenate D 170N graft copolymer 320600-80-4P, Caprolactone-dimethylsilanediol-ethyl silicate-HMDI trimer-2-hydroxyethyl methacrylate-methyl methacrylate-methacrylic acid graft copolymer
(polysiloxane-contg. coating compns. with resistance to chipping and scratching)

L16 ANSWER 11 OF 27 HCA COPYRIGHT 2003 ACS

133:351577 Curable resin coating **compositions** with good release property and water and oil repellency. Ariyoshi, Yasushi; Suzuki, Takehiro (Toyo Ink Mfg. Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000309673 A2 20001107, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-117606 19990426.

AB The compns. comprise (A) copolymers of carboxy-contg. unsatd. monomers and (B) copolymers of epoxy-contg. unsatd. monomers, wherein A and/or B comprise block polysiloxane (mol. wt. .gtoreq.800) segments. Thus, 30 parts acrylic acid was polyemd. with 30 parts Me methacrylate and 37.5 parts Bu methacrylate in the presence of 2.5 parts VPS 0501 and 1.5 parts AIBN to give a block copolymer. A coating comprising a cured product of the block copolymer with 40:30:17.5:10:2.5 glycidyl methacrylate-Me methacrylate-Bu methacrylate-2-hydroxyethyl methacrylate-VPS 0501 block copolymer showed good resistance to AcOEt and an oil-based marking ink and peelability from an adhesive tape.

IT 304894-99-3P 304895-01-0P
(curable resin coating compns. with good release property and water and oil repellency)

RN 304894-99-3 HCA

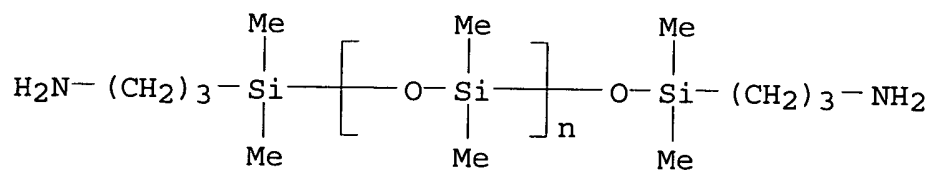
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], butyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

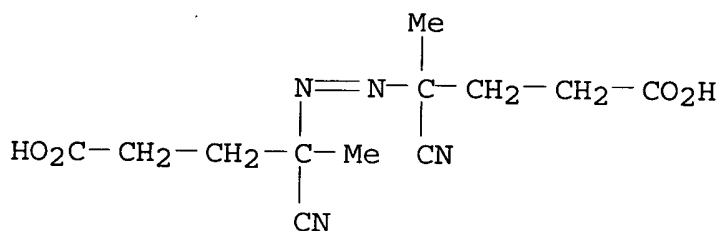
CCI PMS



CM 2

CRN 2638-94-0

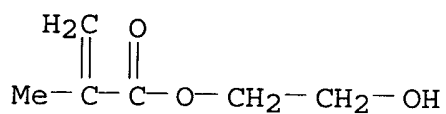
CMF C12 H16 N4 O4



CM 3

CRN 868-77-9

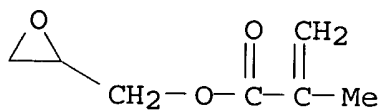
CMF C6 H10 O3



CM 4

CRN 106-91-2

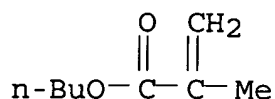
CMF C7 H10 O3



CM 5

CRN 97-88-1

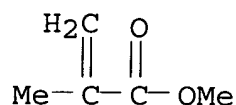
CMF C8 H14 O2



CM 6

CRN 80-62-6

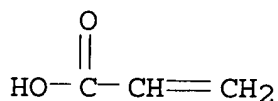
CMF C5 H8 O2



CM 7

CRN 79-10-7

CMF C3 H4 O2



RN 304895-01-0 HCA

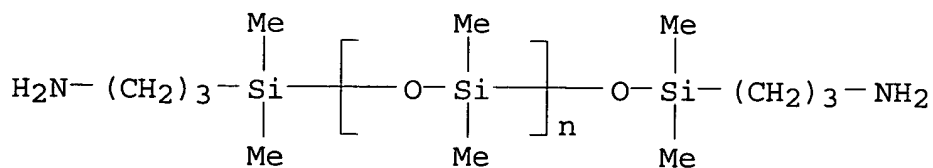
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], butyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

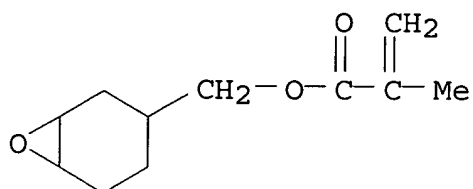
CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS



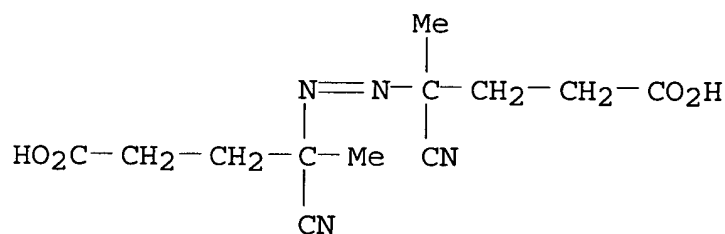
CM 2

CRN 82428-30-6
CMF C11 H16 O3



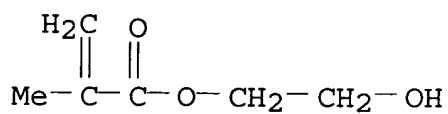
CM 3

CRN 2638-94-0
CMF C12 H16 N4 O4



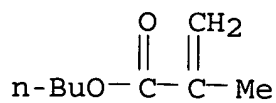
CM 4

CRN 868-77-9
CMF C6 H10 O3



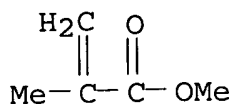
CM 5

CRN 97-88-1
CMF C8 H14 O2



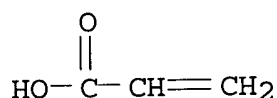
CM 6

CRN 80-62-6
CMF C5 H8 O2



CM 7

CRN 79-10-7
CMF C3 H4 O2



IT 304894-95-9P 304894-96-0P 304894-97-1P

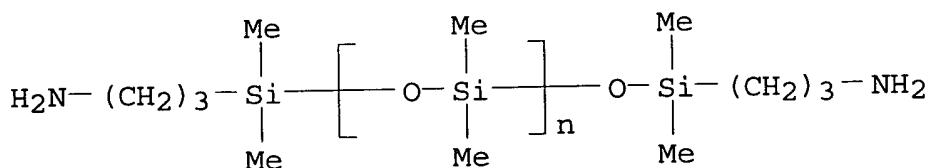
(curable resin coating compns. with good release property and water and oil repellency)

RN 304894-95-9 HCA

CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

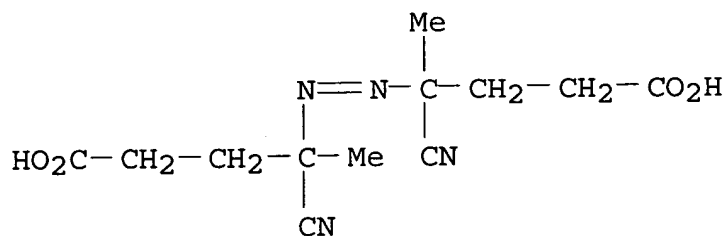
CM 1

CRN 97917-34-5
CMF (C2 H6 O Si)n C10 H28 N2 O Si2
CCI PMS



CM 2

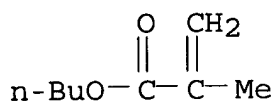
CRN 2638-94-0
CMF C12 H16 N4 O4



CM 3

CRN 97-88-1

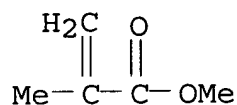
CMF C8 H14 O2



CM 4

CRN 80-62-6

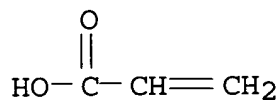
CMF C5 H8 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2

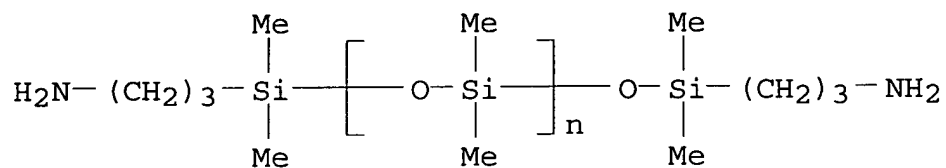


RN 304894-96-0 HCA

CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl
 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl
 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate,
 block (9CI) (CA INDEX NAME)

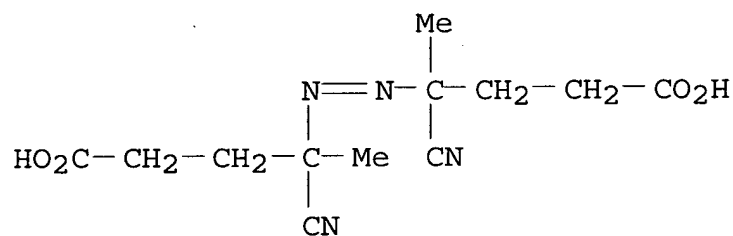
CM 1

CRN 97917-34-5
 CMF (C2 H6 O Si)_n C10 H28 N2 O Si2
 CCI PMS



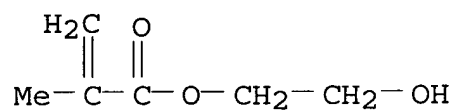
CM 2

CRN 2638-94-0
 CMF C12 H16 N4 O4



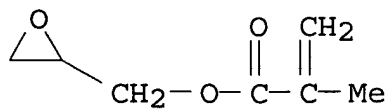
CM 3

CRN 868-77-9
 CMF C6 H10 O3



CM 4

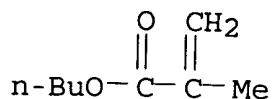
CRN 106-91-2
 CMF C7 H10 O3



CM 5

CRN 97-88-1

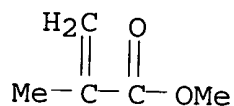
CMF C8 H14 O2



CM 6

CRN 80-62-6

CMF C5 H8 O2



RN 304894-97-1 HCA

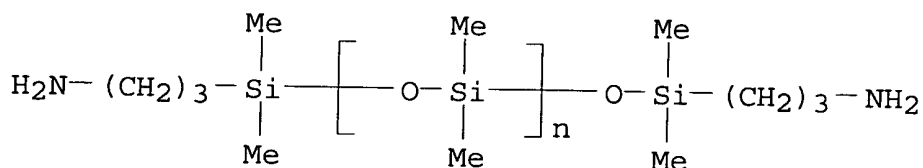
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], butyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

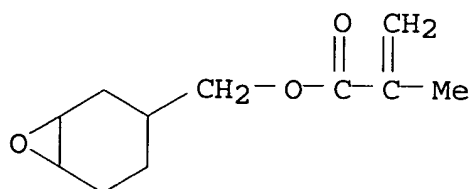
CCI PMS



CM 2

CRN 82428-30-6

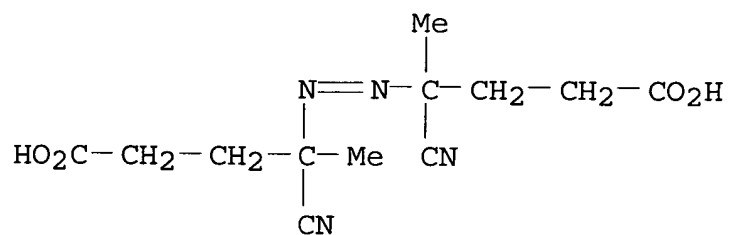
CMF C11 H16 O3



CM 3

CRN 2638-94-0

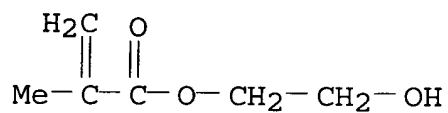
CMF C12 H16 N4 O4



CM 4

CRN 868-77-9

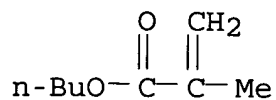
CMF C6 H10 O3



CM 5

CRN 97-88-1

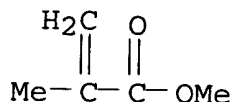
CMF C8 H14 O2



CM 6

CRN 80-62-6

CMF C5 H8 O2



IT 158947-07-0, VPS 0501

(polymn. initiator; curable resin coating compns. with good release property and water and oil repellency)

RN 158947-07-0 HCA

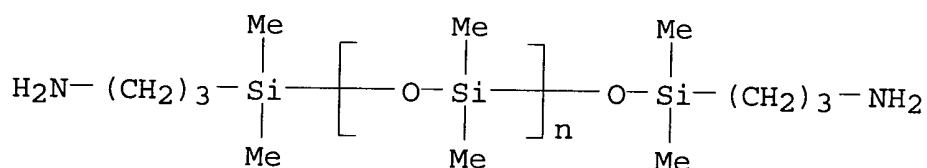
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

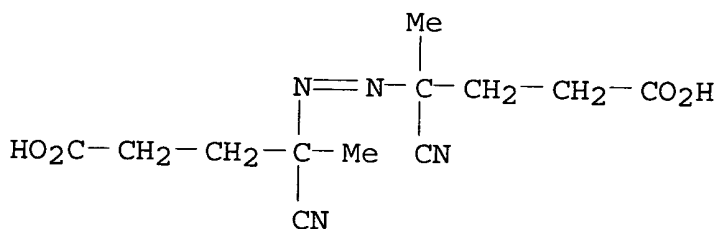
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C08L033-00

ICS C08G059-20; C08G059-42; C08G077-42; C08L035-00; C08L063-10; C08L083-10; C09D133-02; C09D135-00; C09D163-10; C09D183-10

CC 42-10 (Coatings, Inks, and Related Products)

IT 304894-99-3P 304895-01-0P

(curable resin coating compns. with good release property and water and oil repellency)

IT 26898-31-7P, Acrylic acid-butyl methacrylate-methyl methacrylate copolymer 304894-95-9P 304894-96-0P

304894-97-1P

(curable resin coating compns. with good release property and water and oil repellency)

IT 158947-07-0, VPS 0501

(polymn. initiator; curable resin coating compns. with good release property and water and oil repellency)

L16 ANSWER 12 OF 27 HCA COPYRIGHT 2003 ACS

133:136849 Curable resin **compositions** for water-repellent coatings and coated products therefrom. Ohata, Masatoshi; Ohsugi, Koji (Nippon Paint Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000212474 A2 20000802, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-16584 19990126.

AB Title compns. contain (A) acrylic silicone block copolymers prepd. from acrylic compds., other ethylenic unsatd. compds., and crosslinkable acrylic compds. in the presence of azo silicone macro initiators, (B) hardeners, and (C) hydrophobic inorg. oxide powders. Polymg. Bu methacrylate, Et methacrylate, and 2-hydroxyethyl methacrylate in presence of VPS 0501 ga a block copolymer, which was mixed with Cymel 211, Aerosil R 202, and Nacure 5225 was spread on an Al panel and baked to form a film with water-contact angle of 135.degree..

IT 158947-07-0, VPS 0501

(hydrophobic inorg. oxide-contg. curable acrylic silicone block copolymer coatings with water repellency)

RN 158947-07-0 HCA

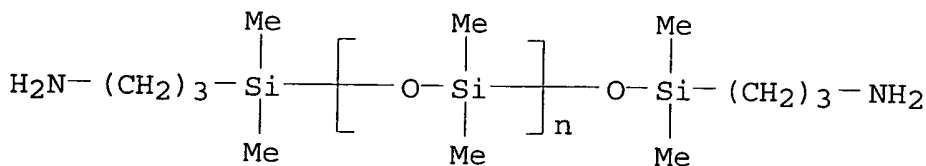
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

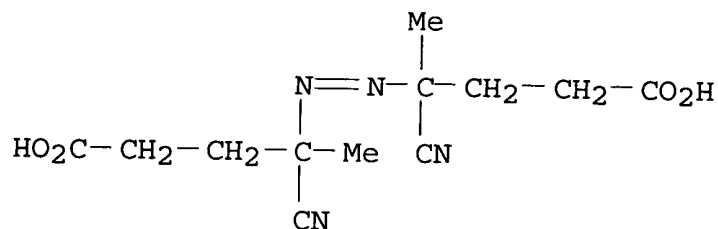
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C09D005-00
ICS C09D183-10; C09K003-18
CC 42-10 (Coatings, Inks, and Related Products)
IT 158947-07-0, VPS 0501
(hydrophobic inorg. oxide-contg. curable acrylic silicone block copolymer coatings with water repellency)

L16 ANSWER 13 OF 27 HCA COPYRIGHT 2003 ACS
133:81534 Electroconductive **composition** for electroconductive roll of electrophotographic apparatus. Yoshikawa, Hitoshi; Arimura, Shoji; Suzuki, Satoshi (Tokai Rubber Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000178444 A2 20000627, 13 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-356702 19981215.

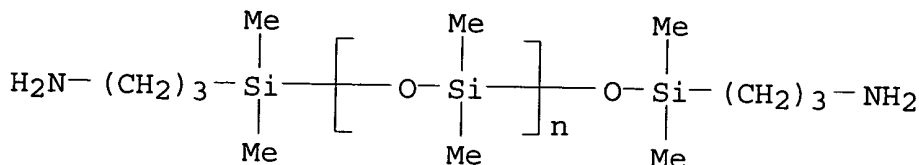
AB The electroconductive compn. has a block copolymer of polysilicon with azo groups and an acrylic repeating unit. The compn. provides the roll of the excellent initial charging characteristics, the long service-life, and generating little filming.

IT 278595-28-1P 278595-29-2P 278596-24-0P
(electroconductive compn. for electroconductive roll)

RN 278595-28-1 HCA
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], 2-hydroxyethyl 2-propenoate and methyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

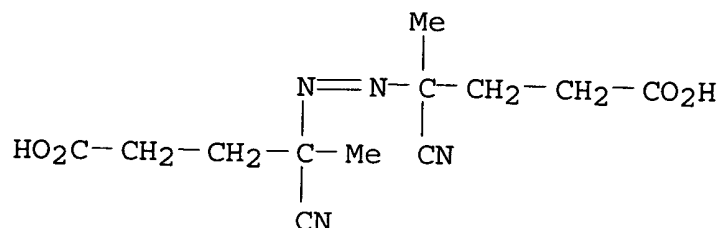
CM 1

CRN 97917-34-5
CMF (C2 H6 O Si)_n C10 H28 N2 O Si2
CCI PMS



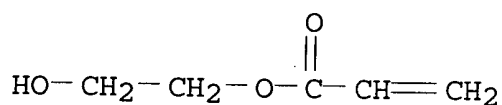
CM 2

CRN 2638-94-0
CMF C12 H16 N4 O4



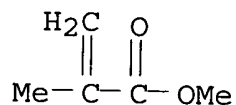
CM 3

CRN 818-61-1
CMF C5 H8 O3



CM 4

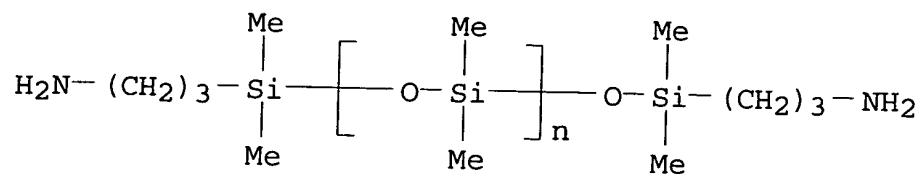
CRN 80-62-6
CMF C5 H8 O2



RN 278595-29-2 HCA
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl
2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl
2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

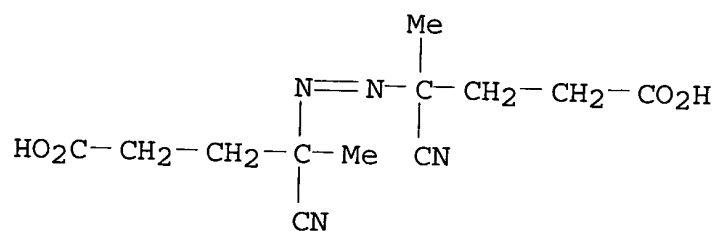
CRN 97917-34-5
CMF (C2 H6 O Si)_n C10 H28 N2 O Si2
CCI PMS



CM 2

CRN 2638-94-0

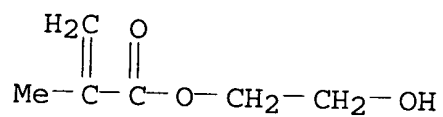
CMF C12 H16 N4 O4



CM 3

CRN 868-77-9

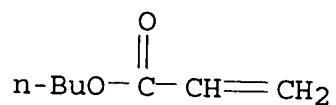
CMF C6 H10 O3



CM 4

CRN 141-32-2

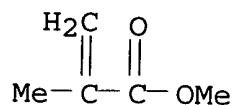
CMF C7 H12 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



RN 278596-24-0 HCA

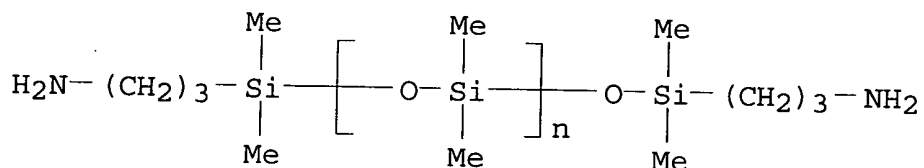
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl
 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and sodium
 ethenylbenzenesulfonate, block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS

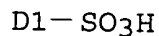
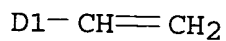
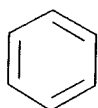


CM 2

CRN 27457-28-9

CMF C8 H8 O3 S . Na

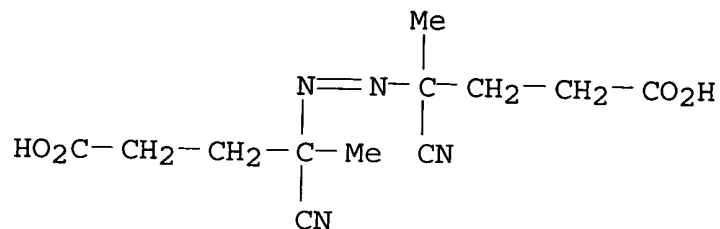
CCI IDS



Na

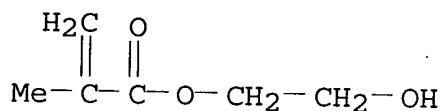
CM 3

CRN 2638-94-0
CMF C12 H16 N4 O4



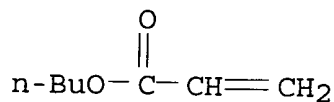
CM 4

CRN 868-77-9
CMF C6 H10 O3



CM 5

CRN 141-32-2
CMF C7 H12 O2



IC ICM C08L079-00
ICS C08L083-10; C08L101-12; F16C013-00; G03G015-02; G03G015-08;
G03G015-16
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and
Other Reprographic Processes)
Section cross-reference(s): 37
IT 278595-28-1P 278595-29-2P 278596-24-0P
(electroconductive compn. for electroconductive roll)

L16 ANSWER 14 OF 27 HCA COPYRIGHT 2003 ACS
133:5945 Water- and oil-repellent coating **compositions** and
surfaces coated with them. Ariyoshi, Yasushi; Suzuki, Takehiro
(Toyo Ink Mfg. Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP
2000144042 A2 20000526, 13 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1999-23371 19990201. PRIORITY: JP 1998-246179
19980831.

AB The compns. useful for protecting hard surfaces such as concrete, glass, plastics, etc., from soiling and graffiti, contain polysiloxane copolymers having polymer co-portions with av. SP (soly. parameter) value 9.7-12. Thus, adding a mixt. of glycidyl methacrylate 40, Me methacrylate 40, 2-hydroxyethyl methacrylate 10, VPS-0501 (polyamide-siloxane) 10, AIBN 1.5, and MIBK 50 to MIBK 100 g heated at 90.degree. over 2 h, stirring with addnl. 0.5 parts AIBN after 1 h and reacting for another 3 h gave a block copolymer (I) bearing epoxy group and SP value of portions other than siloxane 10.2. Mixing 100 parts the I with 11 parts Jeffamine D 230 (curing agent) and coating on a surface gave a coat layer with contact angle 101.degree. and good oil and water repellency.

IT **245678-05-1P 270583-44-3P 270583-45-4P**

(coating; water- and oil-repellent coating compns. and surfaces coated with them)

RN 245678-05-1 HCA

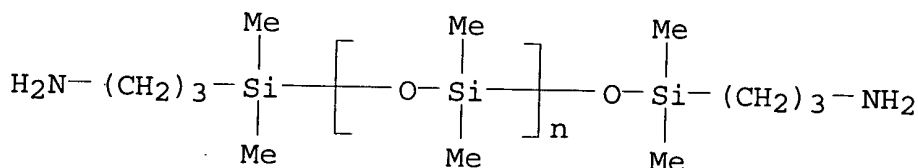
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)poly[oxy(methyl-1,2-ethanediyl)], .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

CCI PMS

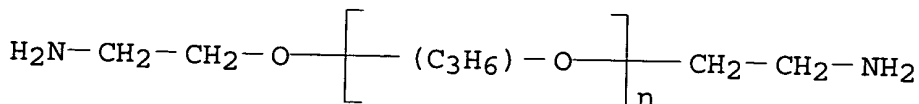


CM 2

CRN 9046-10-0

CMF (C3 H6 O)n C6 H16 N2 O

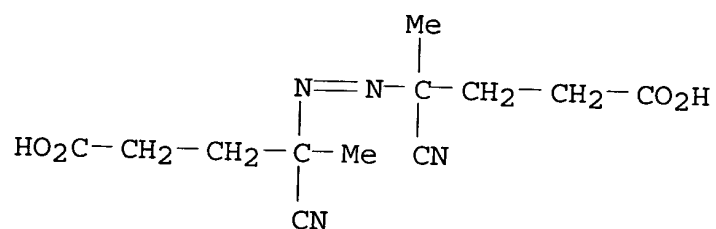
CCI IDS, PMS



2 (D1-Me)

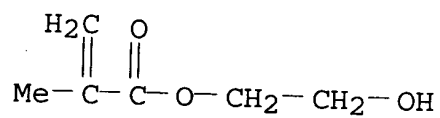
CM 3

CRN 2638-94-0
 CMF C12 H16 N4 O4



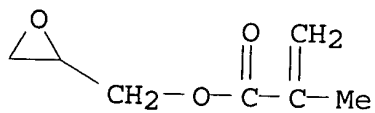
CM 4

CRN 868-77-9
 CMF C6 H10 O3



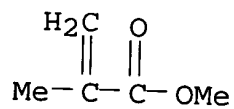
CM 5

CRN 106-91-2
 CMF C7 H10 O3



CM 6

CRN 80-62-6
 CMF C5 H8 O2



RN 270583-44-3 HCA

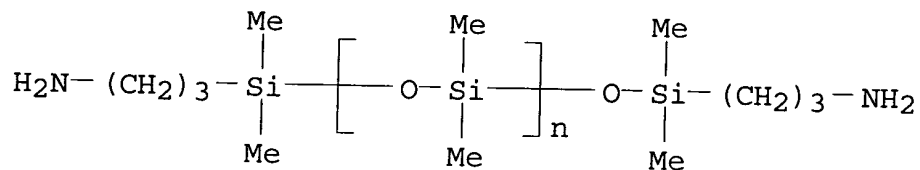
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-(2-aminomethylethyl)-.omega.-(2-
 aminomethylethoxy)poly[oxy(methyl-1,2-ethanediyl)],
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[(3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl
 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl
 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI)
 (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n Cl₀ H₂₈ N₂ O Si₂

CCI PMS

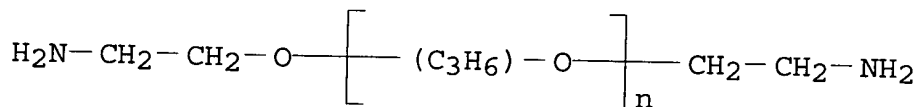


CM 2

CRN 9046-10-0

CMF (C₃ H₆ O)_n C₆ H₁₆ N₂ O

CCI IDS, PMS

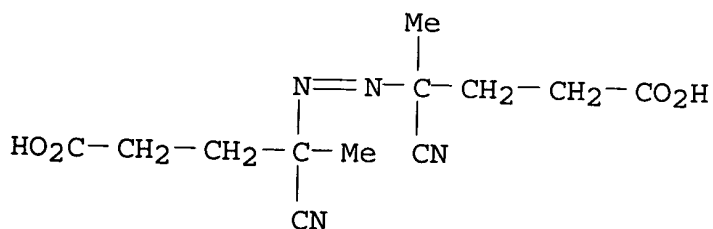


2 (D1-Me)

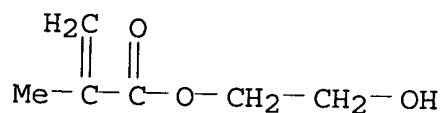
CM 3

CRN 2638-94-0

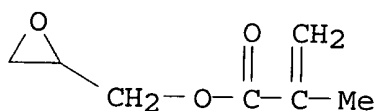
CMF C₁₂ H₁₆ N₄ O₄



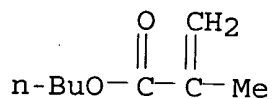
CM 4

CRN 868-77-9
CMF C6 H10 O3

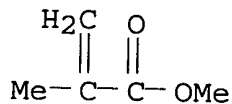
CM 5

CRN 106-91-2
CMF C7 H10 O3

CM 6

CRN 97-88-1
CMF C8 H14 O2

CM 7

CRN 80-62-6
CMF C5 H8 O2

RN 270583-45-4 HCA

CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], butyl
2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl

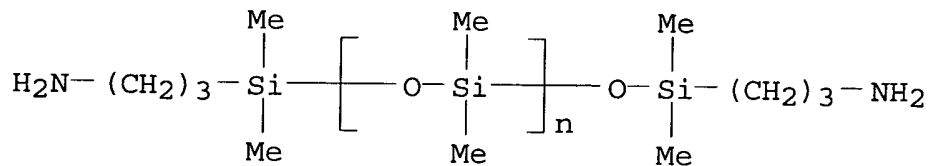
2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

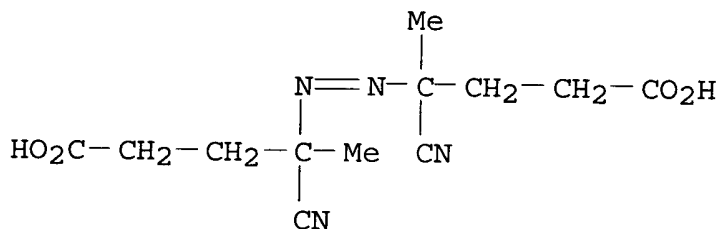
CCI PMS



CM 2

CRN 2638-94-0

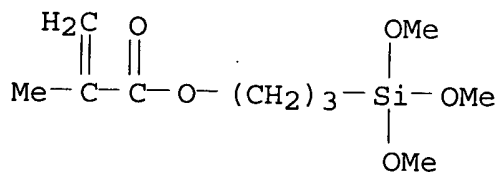
CMF C12 H16 N4 O4



CM 3

CRN 2530-85-0

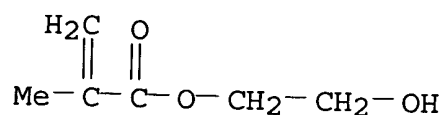
CMF C10 H20 O5 Si



CM 4

CRN 868-77-9

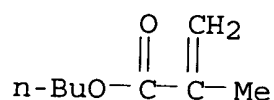
CMF C6 H10 O3



CM 5

CRN 97-88-1

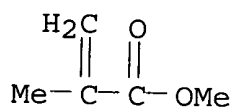
CMF C8 H14 O2



CM 6

CRN 80-62-6

CMF C5 H8 O2



IT 245678-04-0P 270583-36-3P 270583-37-4P
270583-38-5P

(water- and oil-repellent coating compns. and surfaces coated
with them)

RN 245678-04-0 HCA

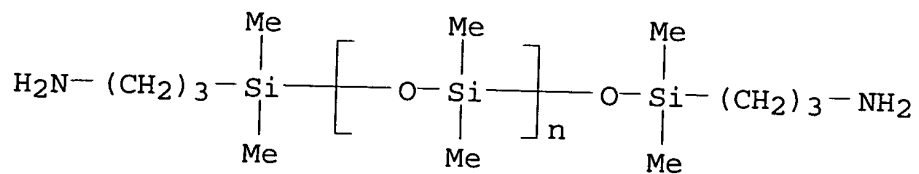
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[(3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],
2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate
and oxiranylmethyl 2-methyl-2-propenoate, block (9CI) (CA INDEX
NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

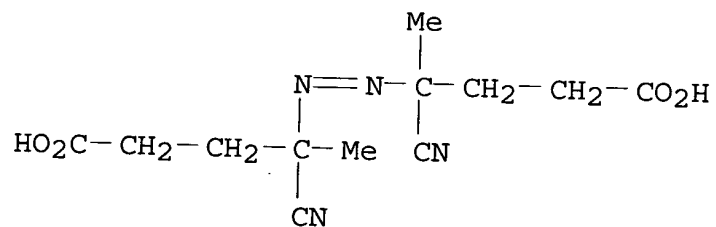
CCI PMS



CM 2

CRN 2638-94-0

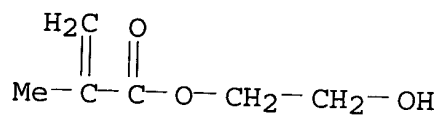
CMF C12 H16 N4 O4



CM 3

CRN 868-77-9

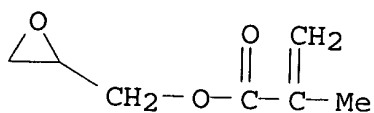
CMF C6 H10 O3



CM 4

CRN 106-91-2

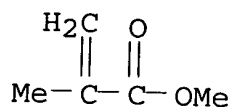
CMF C7 H10 O3



CM 5

CRN 80-62-6

CMF C5 H8 O2



RN 270583-36-3 HCA

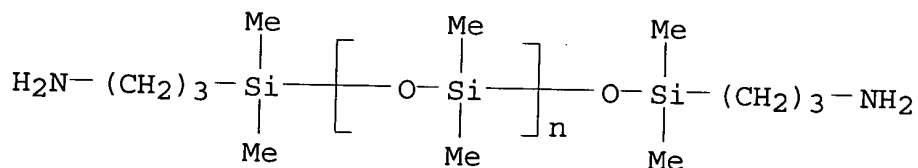
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl
2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl
2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl
2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

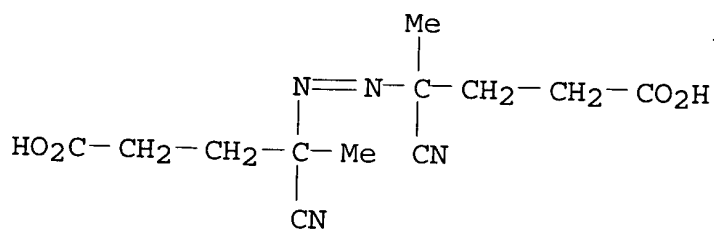
CCI PMS



CM 2

CRN 2638-94-0

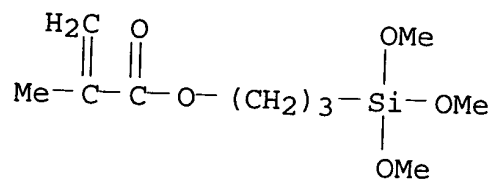
CMF C12 H16 N4 O4



CM 3

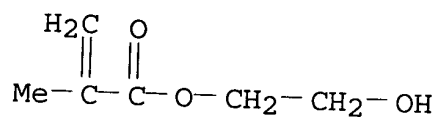
CRN 2530-85-0

CMF C10 H20 O5 Si



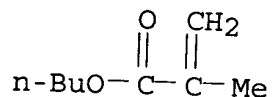
CM 4

CRN 868-77-9
CMF C6 H10 O3



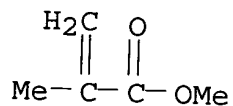
CM 5

CRN 97-88-1
CMF C8 H14 O2



CM 6

CRN 80-62-6
CMF C5 H8 O2



RN 270583-37-4 HCA

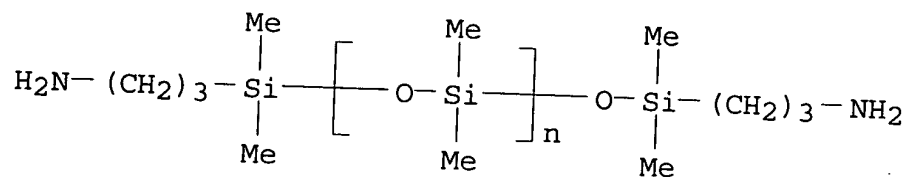
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[(3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],
1,1-dimethylethyl 2-methyl-2-propenoate, 2-methylpropyl 2-propenoate
and oxiranylmethyl 2-methyl-2-propenoate, block (9CI) (CA INDEX
NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

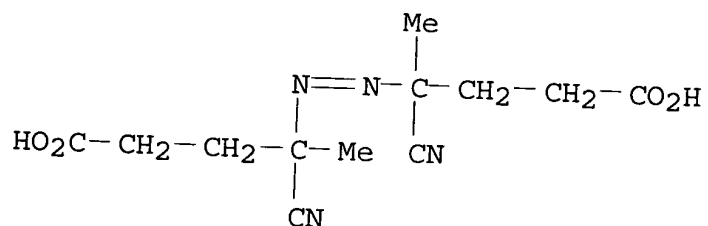
CCI PMS



CM 2

CRN 2638-94-0

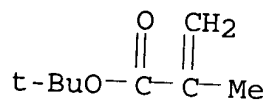
CMF C12 H16 N4 O4



CM 3

CRN 585-07-9

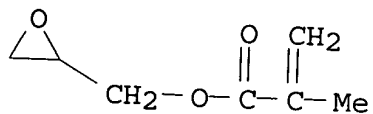
CMF C8 H14 O2



CM 4

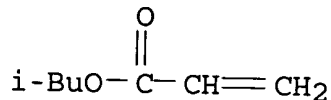
CRN 106-91-2

CMF C7 H10 O3



CM 5

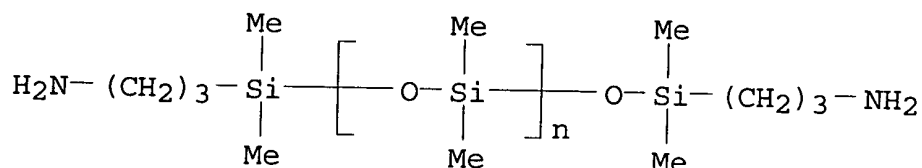
CRN 106-63-8
CMF C7 H12 O2



RN 270583-38-5 HCA
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], methyl
2-methyl-2-propenoate, 2-methylpropyl 2-methyl-2-propenoate,
2-methylpropyl 2-propenoate and 3-(trimethoxysilyl)propyl
2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

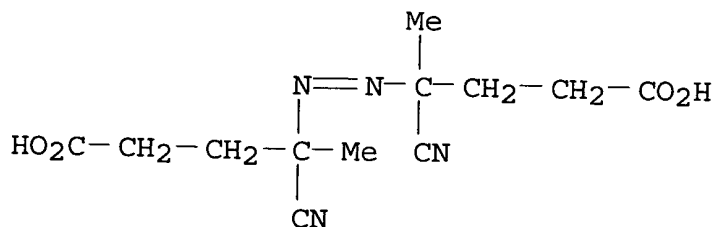
CM 1

CRN 97917-34-5
CMF (C2 H6 O Si)_n C10 H28 N2 O Si2
CCI PMS



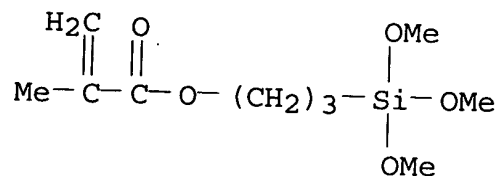
CM 2

CRN 2638-94-0
CMF C12 H16 N4 O4



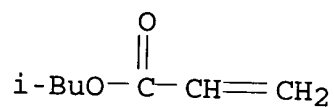
CM 3

CRN 2530-85-0
CMF C10 H20 O5 Si



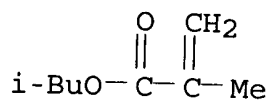
CM 4

CRN 106-63-8
CMF C7 H12 O2



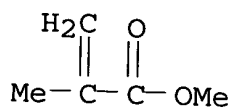
CM 5

CRN 97-86-9
CMF C8 H14 O2



CM 6

CRN 80-62-6
CMF C5 H8 O2



IC ICM C09D151-08
ICS C09D005-00; C09D005-16; C09D153-00; C09D183-10; C08G077-442;
C09D133-00; C09D201-00
CC 42-10 (Coatings, Inks, and Related Products)

- IT 245678-05-1P 270583-43-2P 270583-44-3P
 270583-45-4P 270583-46-5P 270583-47-6P
 (coating; water- and oil-repellent coating compns. and surfaces coated with them)
- IT 26898-31-7P, Acrylic acid-butyl methacrylate-methyl methacrylate copolymer 33479-46-8P, Butyl methacrylate-glycidyl methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer 150525-88-5P, Butyl methacrylate-2-hydroxyethyl methacrylate-.gamma.-methacryloxypropyltrimethoxysilane-methyl methacrylate copolymer 205380-28-5P 223573-91-9P
 245678-04-0P 270583-36-3P 270583-37-4P
 270583-38-5P 270583-39-6P 270583-40-9P 270583-41-0P
 270583-42-1P
 (water- and oil-repellent coating compns. and surfaces coated with them)
- L16 ANSWER 15 OF 27 HCA COPYRIGHT 2003 ACS
- 132:309756 Water- and oil-repellent, cold-curable polyorganosiloxane block copolymer **composition**, production thereof and base material coated with the same. Ariyoshi, Yasushi; Suzuki, Takehiro (Toyo Ink Manufacturing Co., Ltd., Japan). Eur. Pat. Appl. EP 997484 A1 20000503, 19 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 1999-121266 19991025. PRIORITY: JP 1998-303444 19981026.
- AB The title compn., useful as an antigraffiti coating, comprises (A) a block copolymer of a polyorganosiloxane portion such as dimethylsiloxane, and a polymer portion having an epoxy, a hydroxyl, and a hydrolytic silyl group; and, preferably, (B) a polyfunctional amine compd. such as a polyoxyalkylenepolyamine having a mol. wt. .ltoreq.1000; (C) a polyfunctional (meth)acrylate compd. such as ditrimethylolpropane tetra(meth)acrylate; and (D) a silane compd. having an epoxy or an amino group. The block copolymer is produced by copolyng. .alpha.,.beta.-ethylenically unsatd. monomers in the presence of a polymeric azo-type initiator and a radical polymn. initiator having a mol. wt. .ltoreq.1000. The base material can be artificial stone, glass, or plastic, preferably is transparent, transmits 99% of light of wavelength 660 nm, and is useful for preventing staining of civil or construction materials. Thus, glycidyl methacrylate 40, 2-hydroxyethyl methacrylate 10, .gamma.-methacryloxypropyltrimethoxysilane 5, Me methacrylate 30, Bu methacrylate 10, VPS 0501 5, azobisisobutyronitrile 0.5 and Me iso-Bu ketone 50 parts were polymd. at 90.degree. for 3 h to obtain a resin soln. having 50 wt.% solids block copolymer. A mixt. comprised of above soln. 100, ditrimethylolpropane tetraacrylate 8.21, and Jeffamine D 230 20.2 parts dild. to 30 wt.%, was applied (10 .mu.m) to an acrylic plate and dried at 23.degree. for 24 h to obtain a cured coating having transmission factor 103, durable time >12 h after mixing, marker ink was repelled to form a spot, and the ink was thoroughly removed with a dry cloth after 24 h.
- IT 265123-90-8P, n-Butyl methacrylate-glycidyl

methacrylate-2-hydroxyethyl methacrylate-.gamma.-
methacryloxypropyltrimethoxysilane-methyl methacrylate-VPS 0501
block copolymer

(cold-curable polyorganosiloxane block copolymer for
soiling-resistant coatings)

RN 265123-90-8 HCA

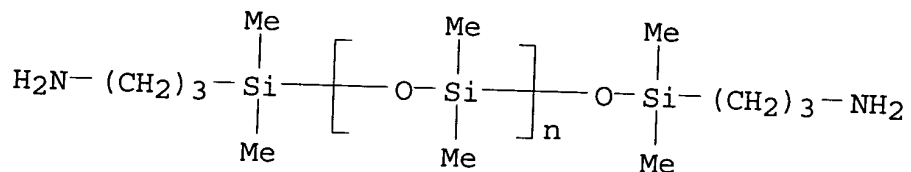
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl
2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl
2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and
3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, block (9CI) (CA
INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

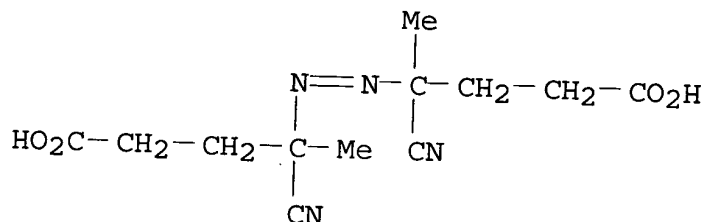
CCI PMS



CM 2

CRN 2638-94-0

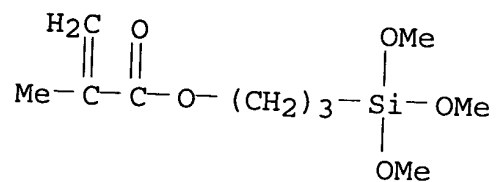
CMF C12 H16 N4 O4



CM 3

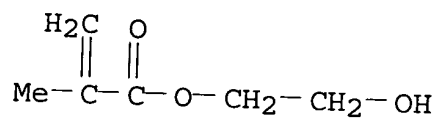
CRN 2530-85-0

CMF C10 H20 O5 Si



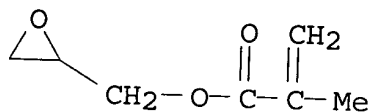
CM 4

CRN 868-77-9
CMF C6 H10 O3



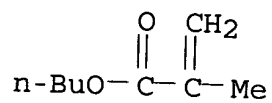
CM 5

CRN 106-91-2
CMF C7 H10 O3



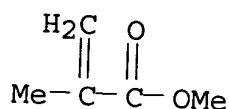
CM 6

CRN 97-88-1
CMF C8 H14 O2

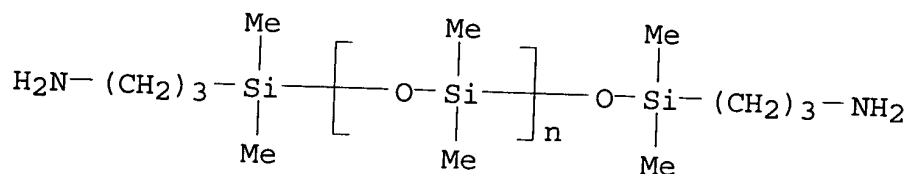


CM 7

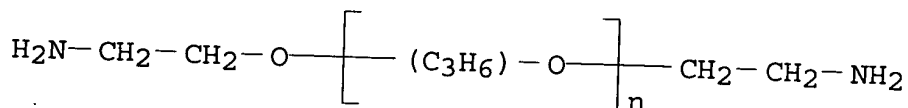
CRN 80-62-6
CMF C5 H8 O2



IT 265123-91-9P 265123-92-0P 265123-93-1P
 265123-94-2P
 (crosslinked; cold-curable polyorganosiloxane block copolymer for
 soiling-resistant coatings)
 RN 265123-91-9 HCA
 CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-(2-aminomethylethyl)-.omega.-(2-
 aminomethylethoxy)poly[oxy(methyl-1,2-ethanediyl)],
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl
 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl
 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and
 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, block (9CI) (CA
 INDEX NAME)
 CM 1
 CRN 97917-34-5
 CMF (C2 H6 O Si)n C10 H28 N2 O Si2
 CCI PMS



CM 2
 CRN 9046-10-0
 CMF (C3 H6 O)n C6 H16 N2 O
 CCI IDS, PMS

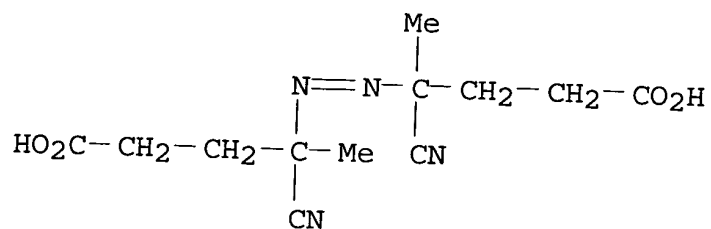


2 (D1-Me)

CM 3

CRN 2638-94-0

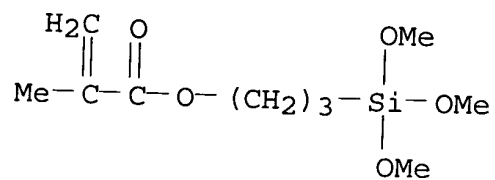
CMF C12 H16 N4 O4



CM 4

CRN 2530-85-0

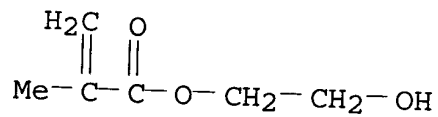
CMF C10 H20 O5 Si



CM 5

CRN 868-77-9

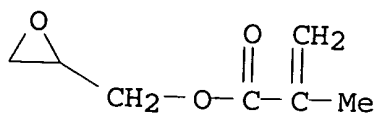
CMF C6 H10 O3



CM 6

CRN 106-91-2

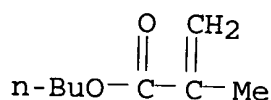
CMF C7 H10 O3



CM 7

CRN 97-88-1

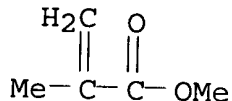
CMF C8 H14 O2



CM 8

CRN 80-62-6

CMF C5 H8 O2



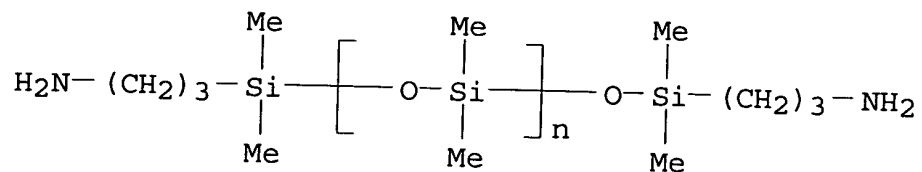
RN 265123-92-0 HCA
 CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-(2-aminomethylethyl)-.omega.-(2-
 aminomethylethoxy)poly[oxy(methyl-1,2-ethanediyl)],
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],
 2-[[2,2-bis[[1-oxo-2-propenyl]oxy]methyl]butoxy]methyl]-2-ethyl-1,3-
 propanediyl di-2-propenoate, butyl 2-methyl-2-propenoate,
 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate,
 oxiranylmethyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl
 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

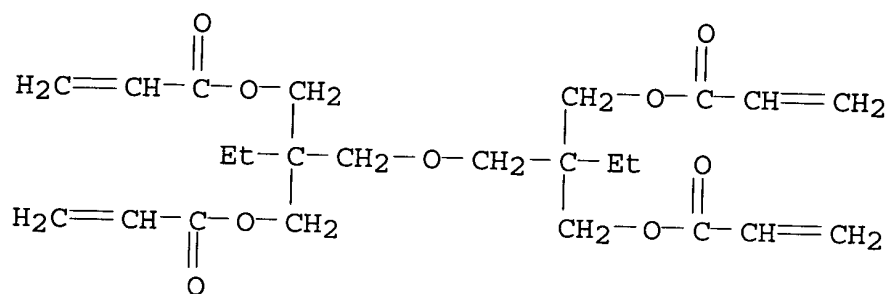
CCI PMS



CM 2

CRN 94108-97-1

CMF C24 H34 O9

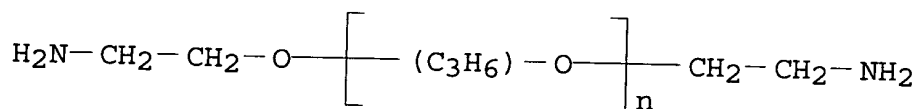


CM 3

CRN 9046-10-0

$$\text{CMF} \quad (\text{C}_3 \text{ H}_6 \text{ O})_n \text{ C}_6 \text{ H}_{16} \text{ N}_2 \text{ O}$$

CCI IDS, PMS

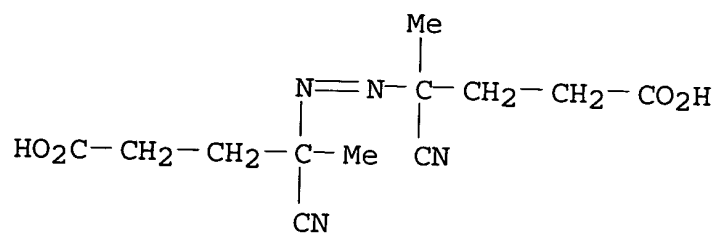


2 (D1-Me)

CM 4

CRN 2638-94-0

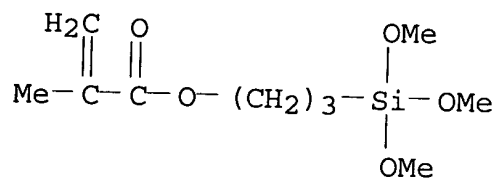
CMF C12 H16 N4 O4



CM 5

CRN 2530-85-0

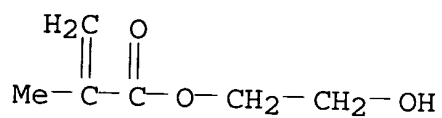
CMF C10 H20 O5 Si



CM 6

CRN 868-77-9

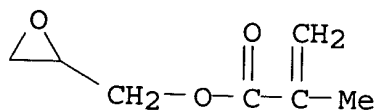
CMF C6 H10 O3



CM 7

CRN 106-91-2

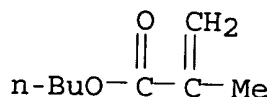
CMF C7 H10 O3



CM 8

CRN 97-88-1

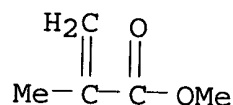
CMF C8 H14 O2



CM 9

CRN 80-62-6

CMF C5 H8 O2



RN 265123-93-1 HCA

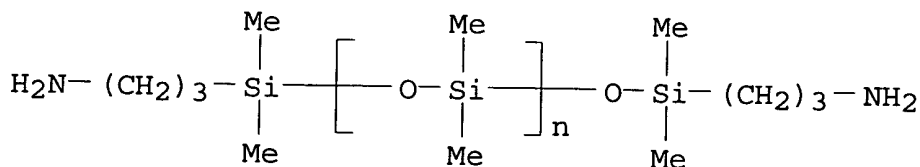
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)poly[oxy(methyl-1,2-ethanediyl)], .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 2-[[2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl di-2-propenoate, butyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate, trimethoxy[3-(oxiranylmethoxy)propyl]silane and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

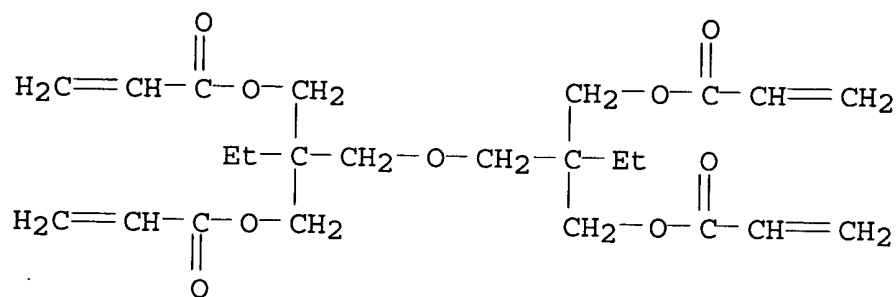
CCI PMS



CM 2

CRN 94108-97-1

CMF C24 H34 O9

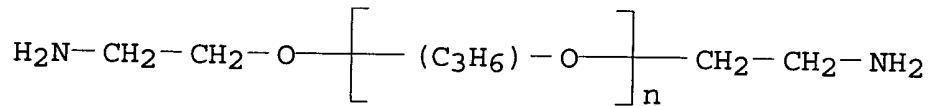


CM 3

CRN 9046-10-0

CMF (C3 H6 O)_n C6 H16 N2 O

CCI IDS, PMS

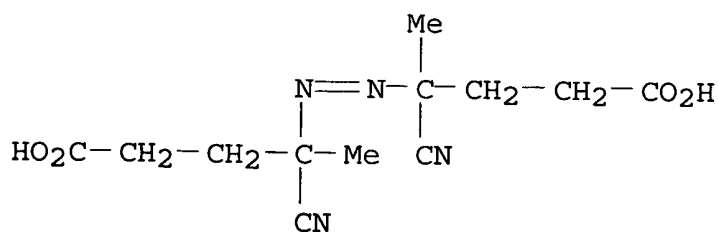


2 (D1-Me)

CM 4

CRN 2638-94-0

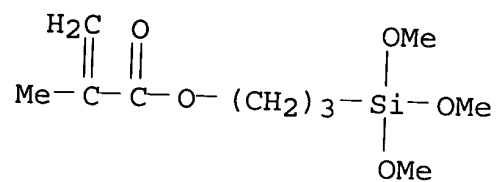
CMF C12 H16 N4 O4



CM 5

CRN 2530-85-0

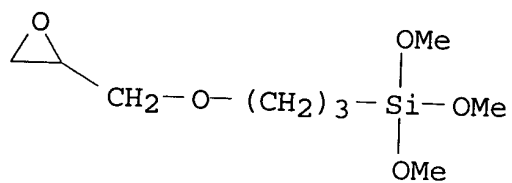
CMF C10 H20 O5 Si



CM 6

CRN 2530-83-8

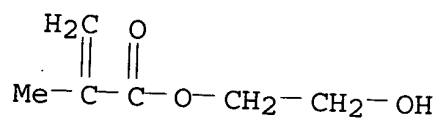
CMF C9 H20 O5 Si



CM 7

CRN 868-77-9

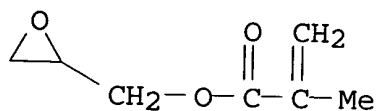
CMF C6 H10 O3



CM 8

CRN 106-91-2

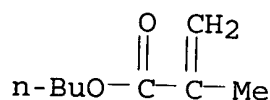
CMF C7 H10 O3



CM 9

CRN 97-88-1

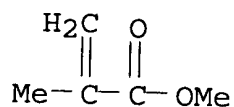
CMF C8 H14 O2



CM 10

CRN 80-62-6

CMF C5 H8 O2



RN 265123-94-2 HCA

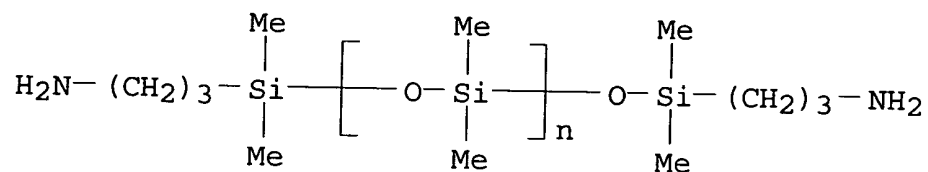
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)poly[oxy(methyl-1,2-ethanediyl)], .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 2-[[2,2-bis[[1-oxo-2-propenyl]oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl di-2-propenoate, butyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate, 3-(triethoxysilyl)-1-propanamine and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

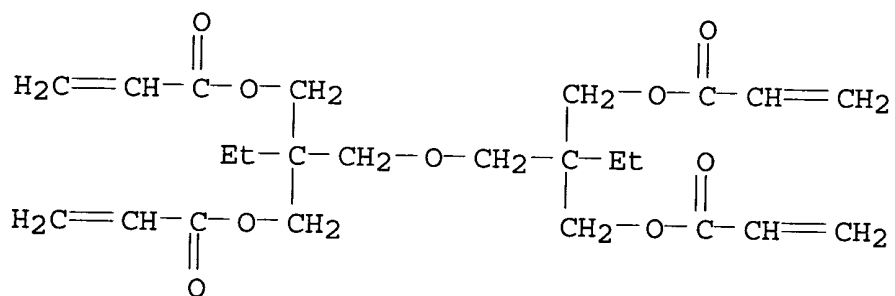
CCI PMS



CM 2

CRN 94108-97-1

CMF C24 H34 O9

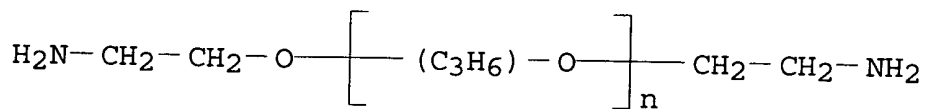


CM 3

CRN 9046-10-0

$$\text{CMF} \quad (\text{C}_3 \text{ H}_6 \text{ O})_n \text{ C}_6 \text{ H}_{16} \text{ N}_2 \text{ O}$$

CCI IDS, PMS

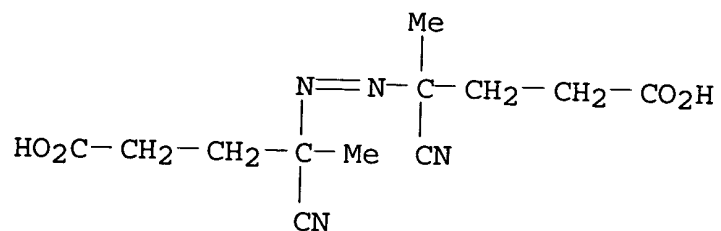


2 (D1-Me)

CM 4

CRN 2638-94-0

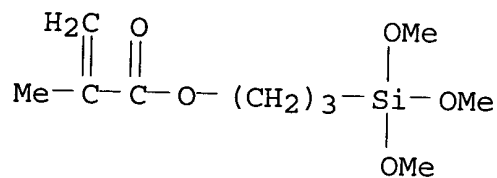
CMF C12 H16 N4 O4



CM 5

CRN 2530-85-0

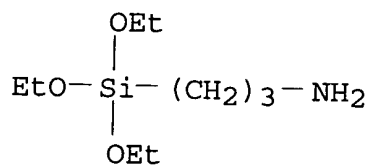
CMF C10 H20 O5 Si



CM 6

CRN 919-30-2

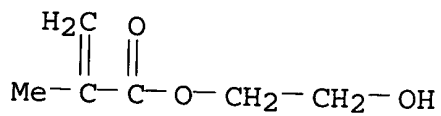
CMF C9 H23 N O3 Si



CM 7

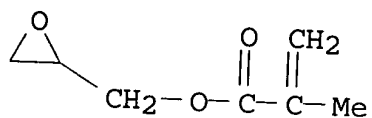
CRN 868-77-9

CMF C6 H10 O3



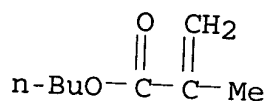
CM 8

CRN 106-91-2
CMF C7 H10 O3



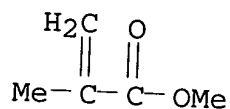
CM 9

CRN 97-88-1
CMF C8 H14 O2



CM 10

CRN 80-62-6
CMF C5 H8 O2



- IC ICM C08F293-00
ICS C09D153-00; C08L053-00
CC 42-3 (Coatings, Inks, and Related Products)
Section cross-reference(s): 35
IT **265123-90-8P**, n-Butyl methacrylate-glycidyl
methacrylate-2-hydroxyethyl methacrylate-.gamma.-
methacryloxypropyltrimethoxysilane-methyl methacrylate-VPS 0501
block copolymer
(cold-curable polyorganosiloxane block copolymer for
soiling-resistant coatings)
IT **265123-91-9P** **265123-92-0P** **265123-93-1P**
265123-94-2P
(crosslinked; cold-curable polyorganosiloxane block copolymer for
soiling-resistant coatings)

L16 ANSWER 20 OF 27 HCA COPYRIGHT 2003 ACS

130:238914 Storage-stable and re-coatable aqueous coating compositions. Inukai, Hiroshi; Marumoto, Etsuzo; Iida, Akihito (Toa Gosei Chemical Industry Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11061030 A2 19990305 Heisei, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-230384 19970812.

AB Title compns., useful for in- and outdoor uses contain 100 parts base resins and 0.1-100 parts polymers prepd. by radical polymn. of CH₂:CRCO(OR₁)NOR₂ (R = H, Me; R₁ = alkylene; R₂ = hydrocarbyl; n = 1-30) in the presence of polymeric azo compds. An aq. compn. contg. 100 g acrylic acid-acryloyloxypropyltriethoxysilane-chlorotrifluoroethylene-versatic 9 acid vinyl ester-vinyl p-tert-butylbenzoate-vinyl propionate copolymer, 20 g a NK Ester M 230G polymer prepd. in the presence of VPS 0501, and Bu₂Sn dilaurate showed good storage stability at 50.degree. for 1 mo and was coated on an Al plate to form a film with good re-coatability and soil, water, and weather resistance.

IT 158947-07-0, VPS 0501
(aq. acrylic or fluoro topcoats contg. polyoxyalkylene acrylic block copolymers with storage stability and re-coatability)

RN 158947-07-0 HCA

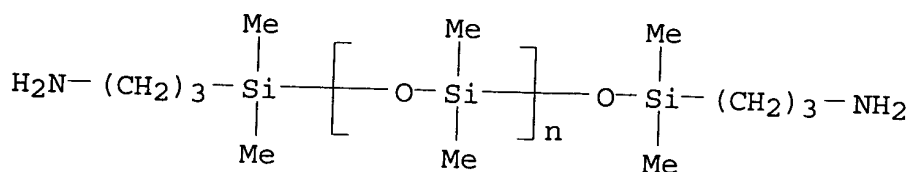
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C₂ H₆ O Si)_n C₁₀ H₂₈ N₂ O Si₂

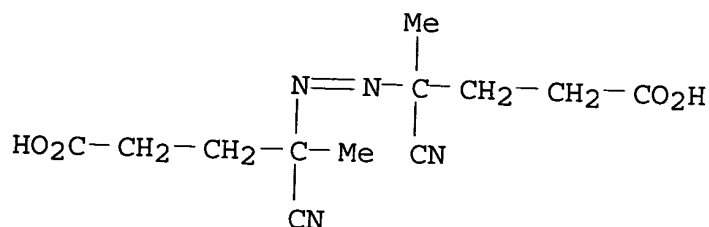
CCI PMS



CM 2

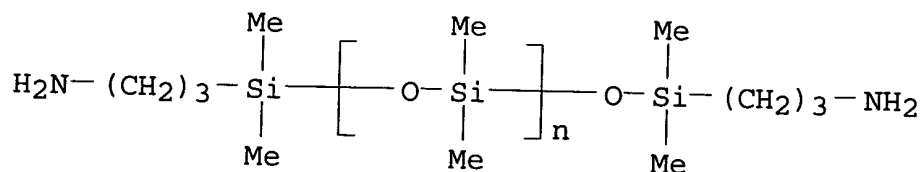
CRN 2638-94-0

CMF C₁₂ H₁₆ N₄ O₄



- IC ICM C09D155-00
 ICS C08F004-04; C08F290-06; C08F299-00; C09D127-12; C09D133-08;
 C09D153-00; C09D201-00
 CC 42-10 (Coatings, Inks, and Related Products)
 IT 158947-07-0, VPS 0501
 (aq. acrylic or fluoro topcoats contg. polyoxyalkylene acrylic
 block copolymers with storage stability and re-coatability)
- L16 ANSWER 21 OF 27 HCA COPYRIGHT 2003 ACS
 130:224448 Curable resin **compositions** for water-repellent
 coatings. Oohata, Masatoshi; Mikami, Shigeru; Osugi, Koji; Fushimi,
 Akira; Tooi, Teruzo (Nippon Paint Co., Ltd., Japan). Jpn. Kokai
 Tokkyo Koho JP 11043648 A2 19990216 Heisei, 6 pp. (Japanese).
 CODEN: JKXXAF. APPLICATION: JP 1997-217966 19970728.
- AB Title compns. contain (a) acrylic silicone block resins obtained by
 polymn. of crosslinkable functional group-contg. acrylic monomers or
 their mixts. with other ethylenically unsatd. monomers in the
 presence of 2,2'-azobisnitrile group-contg. polysiloxanes as
 macroinitiators and (b) film-forming resins having crosslinkable
 groups or groups reactive to (a), and (c) curing agents. Coatings
 contg. the compns. as vehicle components, are also claimed. Thus,
 50.4 g Bu methacrylate was polymd. with 29.6 g 2-hydroxyethyl
 methacrylate in the presence of VPS 0501 to obtain a block
 copolymer, 0.5 part of which was mixed with 100 parts Mac Flow O 280
 (curable acrylic resin compn.), sprayed on a tinplate, and baked to
 form a coating showing water contact angle 102.degree. initially and
 91.degree. after 1 h in hot water at 80.degree..
- IT 158947-07-0DP, VPS 0501, reaction products with
 methacrylates, polymers with film-forming resins
 (curable resin compns. contg. block acrylic silicones and
 film-forming resins for water-repellent coatings)
- RN 158947-07-0 HCA
 CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA
 INDEX NAME)
- CM 1
- CRN 97917-34-5
 CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

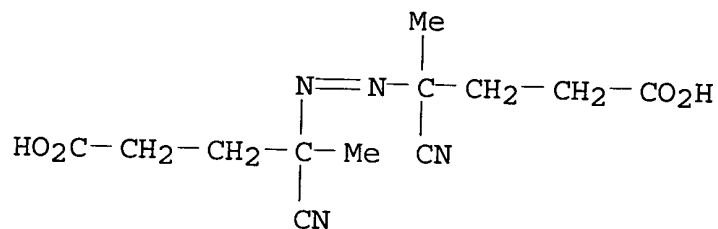
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IT 158947-07-0, VPS 0501

(macroinitiators; curable resin compns. contg. block acrylic
silicones and film-forming resins for water-repellent coatings)

RN 158947-07-0 HCA

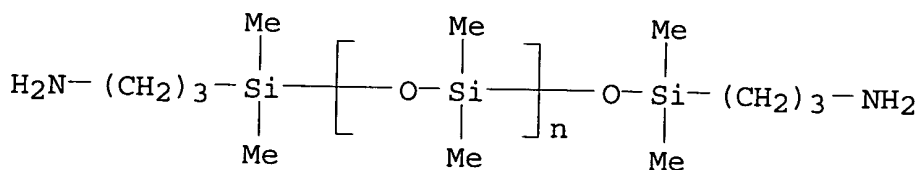
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[(3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA
INDEX NAME)

CM 1

CRN 97917-34-5

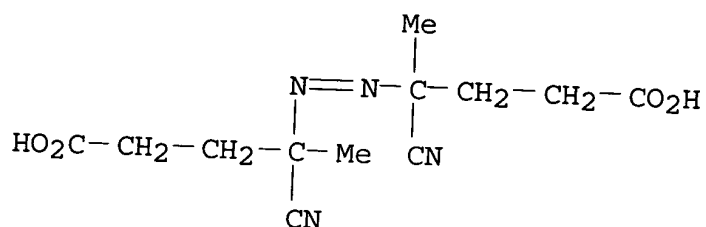
CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS



CM 2

CRN 2638-94-0
CMF C12 H16 N4 O4



- IC ICM C09D183-10
ICS C09D005-00; C09D153-00; C09D201-02
- CC 42-12 (Coatings, Inks, and Related Products)
- IT 97-88-1DP, Butyl methacrylate, reaction products with VPS 0501 and methacrylates, polymers with film-forming resins 106-91-2DP, Glycidyl methacrylate, reaction products with VPS 0501 and methacrylates, polymers with film-forming resins 144246-19-5DP, Fleki Coat 100HQ, polymers with block acrylic polysiloxanes 158947-07-0DP, VPS 0501, reaction products with methacrylates, polymers with film-forming resins 221158-03-8DP, Nax Mighty Lac G-II 295, polymers with block acrylic polysiloxanes 221158-12-9DP, Mac Flow O 280, polymers with block acrylic polysiloxanes (curable resin compns. contg. block acrylic silicones and film-forming resins for water-repellent coatings)
- IT 158947-07-0, VPS 0501 (macroinitiators; curable resin compns. contg. block acrylic silicones and film-forming resins for water-repellent coatings)
- L16 ANSWER 22 OF 27 HCA COPYRIGHT 2003 ACS
- 129:347143 Personal care **compositions** comprising a silicone-containing adhesive copolymer. Midha, Sanjeev; Bolich, Raymond Edward, Jr.; Jividen, Kathleen Bridget (The Procter & Gamble Co., USA). PCT Int. Appl. WO 9848772 A1 19981105, 47 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1998-US8350 19980424. PRIORITY: US 1997-842939 19970425; US 1997-939385 19970929.
- AB The present invention relates to personal care compns. These compns. comprise a silicone contg. adhesive copolymer and a solvent for the copolymer selected from the group consisting of water, ethanol, n-propanol, isopropanol, and mixts. thereof. The compn.,

when dried, exhibits a cohesive strength of greater than about 0.5 kgf/mm², and a total energy absorption per unit vol. of greater than about 0.55 kgfmm/mm³. The compns., when dried, also preferably exhibit an impact strength of greater than about 7000 ergs. Preferred are hairspray embodiments of the present invention having improved removeability from hair as defined by a hair stiffness value of from 0 to about 3.5 (0 to 4 scale) and a hair flaking value of from 0 to about 3.5 (0 to 4 scale), which values are detd. by the removeability methodol. defined herein. Poly(tert-Bu acrylate-co-2-methoxyethyl acrylate-co-acrylic acid)-graft-(polyisobutylene-polydimethylsiloxane) was prepd. and formulated into nonaerosol hair prepns.

IT 158947-07-0D, VPS 1001, macroazoinitiator with acrylic polymers

RN (hair prepns. contg. adhesive acrylic-silicone copolymers)
158947-07-0 HCA

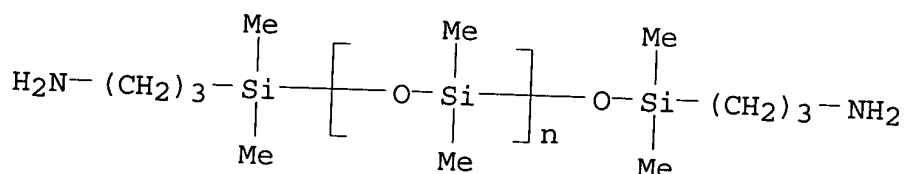
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

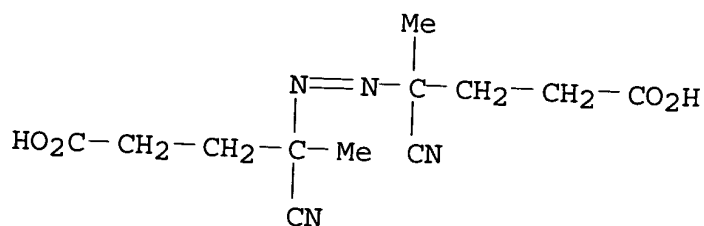
CCI PMS



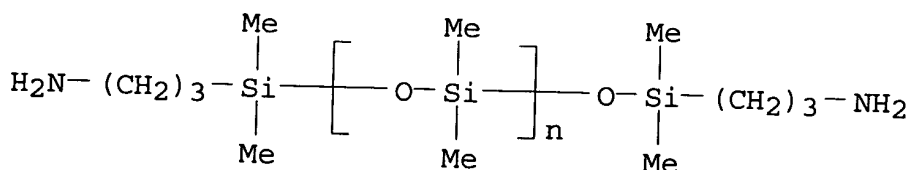
CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



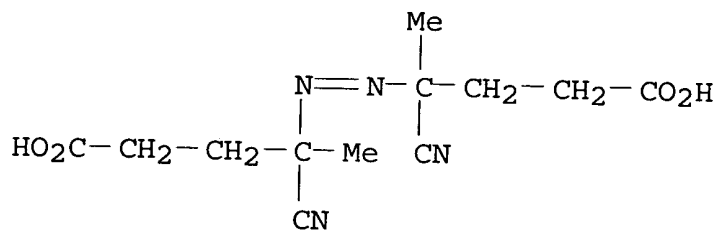
- IC ICM A61K007-06
 CC 62-3 (Essential Oils and Cosmetics)
 IT 814-68-6D, Acryloyl chloride, reaction products with polyisobutylene
 9003-27-4D, Polyisobutylene, acryloyl end-capped, graft polymers
 with acrylic copolymers 158947-07-0D, VPS 1001,
 macroazoinitiator with acrylic polymers 215589-81-4D, polymers
 with polydimethylsiloxane 215593-82-1D, hydrolyzed,
 vinylphenyl-terminated, macromers with graft acrylic polymers
 215593-84-3D, macromers with methacrylate-methacrylic acid
 copolymers 215593-87-6D, graft copolymers with acryloyl-endcapped
 isobutylene macromers
 (hair preps. contg. adhesive acrylic-silicone copolymers)
- L16 ANSWER 23 OF 27 HCA COPYRIGHT 2003 ACS
 129:344061 Polydimethylsiloxane **compositions** as antisticking
 agents and thermal transfer recording films. Yokoyama, Norio; Hata,
 Hironori (Natoco Paint Co., Ltd., Japan). PCT Int. Appl. WO 9849236
 A1 19981105, 29 pp. DESIGNATED STATES: W: US; RW: AT, BE, CH, DE,
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (Japanese).
 CODEN: PIXXD2. APPLICATION: WO 1998-JP436 19980202. PRIORITY: JP
 1997-122973 19970425.
- AB A compn. comprises a polydimethylsiloxane copolymer and at least one
 synthetic resin selected from the group consisting of polyvinyl
 acetate derivs., polyamide resins, acrylic resins, epoxy resins, and
 unsatd. polyester resins and precursors thereof and/or a cellulose
 deriv. The compn. is used as antisticking agent in thermal transfer
 recording films having antistick layers. These materials enable
 inhibition of sticking of thermal transfer recording films without
 fail while avoiding scumming of heads and inhibition of defective
 transfer.
- IT 158947-07-0, VPS 0501
 (prepn. of polydimethylsiloxane compns. as antisticking agents)
- RN 158947-07-0 HCA
 CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] (9CI) (CA
 INDEX NAME)
- CM 1
- CRN 97917-34-5
 CMF (C2 H6 O Si)_n C10 H28 N2 O Si2
 CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C08L083-10

ICS C08L077-00; C08L031-04; C08L033-00; C08L063-00; C08L067-06;
C08L001-08; B41M005-26CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 74

IT 158947-07-0, VPS 0501

(prepn. of polydimethylsiloxane compns. as antisticking agents)

L16 ANSWER 24 OF 27 HCA COPYRIGHT 2003 ACS

128:49505 Scratch-resistant coating **compositions** and
decorative sheets therefrom. Nishikata, Akira; Nakayama, Hidetaka;
Hori, Satoru; Murakami, Hideyuki (C. I. Kasei Co., Ltd., Japan).
Jpn. Kokai Tokkyo Koho JP 09296150 A2 19971118 Heisei, 6 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-112777 19960507.AB Title compns. comprise active H-contg. acrylic silicone block
copolymers and polyisocyanates. A compn. contg. HMDI and a block
copolymer prepd. from Bu methacrylate, Me methacrylate,
2-hydroxyethyl methacrylate, and VPS 0501 (azo group-contg.
polysiloxane ester) was coated on a semihard PVC sheet to form a
sheet with good scratch, chem., and soiling resistance and hot
processability.IT 158947-07-0, Azoisobutanol-bis[(carboxymethyl)dimethylsilyl]-
terminated polydimethylsiloxane copolymer
(VPS 0501 and VPS 1001, for prepn. of block copolymers;
polyisocyanate-crosslinkable acrylic silicone block copolymer
coatings for decorative sheets)

RN 158947-07-0 HCA

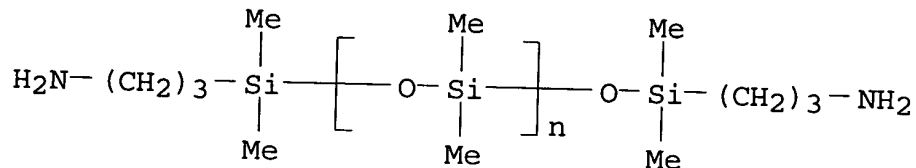
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA
INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

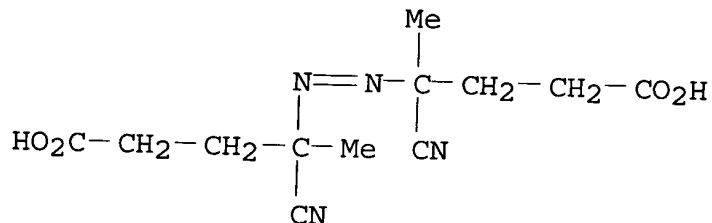
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C09D175-04

ICS C08G018-61; C08J007-04

CC 42-10 (Coatings, Inks, and Related Products)

IT 158947-07-0, Azoisobutanol-bis[(carboxymethyl)dimethylsilyl]-terminated polydimethylsiloxane copolymer

(VPS 0501 and VPS 1001, for prepn. of block copolymers; polyisocyanate-crosslinkable acrylic silicone block copolymer coatings for decorative sheets)

=> d 117 1-41 ti

L17 ANSWER 1 OF 41 HCA COPYRIGHT 2003 ACS

TI Manufacture of polymer fine particles in supercritical carbon dioxide gas

L17 ANSWER 2 OF 41 HCA COPYRIGHT 2003 ACS

TI Production of submicron-sized poly(methyl methacrylate) particles by dispersion polymerization with a poly(dimethylsiloxane)-based azoinitiator in supercritical carbon dioxide

L17 ANSWER 3 OF 41 HCA COPYRIGHT 2003 ACS

TI Particles, and their manufacture without producing fine powders, and

use as cosmetics and coatings

- L17 ANSWER 4 OF 41 HCA COPYRIGHT 2003 ACS
TI Synthesis of antistatic block terpolymers containing poly(N,N-dimethylaminopropylacrylamide) via macro-azo-initiator
- L17 ANSWER 5 OF 41 HCA COPYRIGHT 2003 ACS
TI Dimensionally stable optical retardation films with good adhesion and gas impermeability for liquid crystal displays
- L17 ANSWER 6 OF 41 HCA COPYRIGHT 2003 ACS
TI Atntireflective sheets with high transparency and thermal stability
- L17 ANSWER 7 OF 41 HCA COPYRIGHT 2003 ACS
TI Radiographic image converter panel
- L17 ANSWER 8 OF 41 HCA COPYRIGHT 2003 ACS
TI Biocompatible polysiloxane copolymers, their manufacture, and their uses for medical and ophthalmic materials
- L17 ANSWER 9 OF 41 HCA COPYRIGHT 2003 ACS
TI Polysiloxane block copolymers as bases for hair-styling preparations
- L17 ANSWER 10 OF 41 HCA COPYRIGHT 2003 ACS
TI Synthesis and antistatic property of polydimethylsiloxane-polystyrene-poly(N,N-dimethylacrylamide) block copolymers derived from macro-azo-initiators
- L17 ANSWER 11 OF 41 HCA COPYRIGHT 2003 ACS
TI Weather-resistant acrylic polysiloxane aqueous dispersion coatings and their manufacture
- L17 ANSWER 12 OF 41 HCA COPYRIGHT 2003 ACS
TI Anionic block copolymers containing polysiloxane segments with reduced monomer and solvent contents, and their manufacture
- L17 ANSWER 13 OF 41 HCA COPYRIGHT 2003 ACS
TI Macroazo compounds for manufacture of polyorganosiloxane-polyoxyalkylene block copolymers
- L17 ANSWER 14 OF 41 HCA COPYRIGHT 2003 ACS
TI Macroazo compounds comprising silicone and polyether structures for polymerization initiators
- L17 ANSWER 15 OF 41 HCA COPYRIGHT 2003 ACS
TI Water-containing soft contact lenses
- L17 ANSWER 16 OF 41 HCA COPYRIGHT 2003 ACS
TI Hydrated soft contact lenses containing azo-containing polyoxyethylene polymer

- L17 ANSWER 17 OF 41 HCA COPYRIGHT 2003 ACS
TI Storage-stable curable water emulsions for coatings with good stain and water resistance
- L17 ANSWER 18 OF 41 HCA COPYRIGHT 2003 ACS
TI Copolymer for cosmetic preparation
- L17 ANSWER 19 OF 41 HCA COPYRIGHT 2003 ACS
TI Curable emulsions for coatings with excellent stain resistance
- L17 ANSWER 20 OF 41 HCA COPYRIGHT 2003 ACS
TI Fluoropolymers and their manufacture
- L17 ANSWER 21 OF 41 HCA COPYRIGHT 2003 ACS
TI Film-forming polymers and hair cosmetics containing them
- L17 ANSWER 22 OF 41 HCA COPYRIGHT 2003 ACS
TI Antisticking agent for thermal-transfer recording film
- L17 ANSWER 23 OF 41 HCA COPYRIGHT 2003 ACS
TI Cured materials of unsaturated polyester resin
- L17 ANSWER 24 OF 41 HCA COPYRIGHT 2003 ACS
TI Acrylic siloxane block copolymers having betaine and(or) quaternary ammonium groups
- L17 ANSWER 25 OF 41 HCA COPYRIGHT 2003 ACS
TI Polystyrene-b-polydimethyl siloxane (PDMS) multicomponent polymer networks: styrene polymerization with macromonomeric initiators (macroinimers) having PDMS units
- L17 ANSWER 26 OF 41 HCA COPYRIGHT 2003 ACS
TI Coating process for aluminum substrates
- L17 ANSWER 27 OF 41 HCA COPYRIGHT 2003 ACS
TI Preparation and characterization of block and graft copolymers using macroazoinitiators having siloxane units
- L17 ANSWER 28 OF 41 HCA COPYRIGHT 2003 ACS
TI Manufacture of styrene-type block copolymers by using siloxane group-containing azo compounds as initiators
- L17 ANSWER 29 OF 41 HCA COPYRIGHT 2003 ACS
TI Manufacture of siloxane block copolymer emulsions
- L17 ANSWER 30 OF 41 HCA COPYRIGHT 2003 ACS
TI Soluble organopolysiloxane radical macroinitiators for graft copolymerization.
- L17 ANSWER 31 OF 41 HCA COPYRIGHT 2003 ACS
TI Surface grafting of polymers onto carbon thin film

- L17 ANSWER 32 OF 41 HCA COPYRIGHT 2003 ACS
 TI Graft copolymers from organopolysiloxanes as radical macroinitiators
- L17 ANSWER 33 OF 41 HCA COPYRIGHT 2003 ACS
 TI Preparation of silicone-vinyl chloride block copolymers
- L17 ANSWER 34 OF 41 HCA COPYRIGHT 2003 ACS
 TI Preparation of vinyl chloride-silicone block copolymers
- L17 ANSWER 35 OF 41 HCA COPYRIGHT 2003 ACS
 TI Preparation of vinyl chloride-siloxane block copolymers
- L17 ANSWER 36 OF 41 HCA COPYRIGHT 2003 ACS
 TI Surface modification of carbon microbead by the grafting of polymers
- L17 ANSWER 37 OF 41 HCA COPYRIGHT 2003 ACS
 TI Polymerization of methyl methacrylate in the presence of
 azo-siloxane macroinitiators
- L17 ANSWER 38 OF 41 HCA COPYRIGHT 2003 ACS
 TI Manufacture of azo group-containing polysiloxaneamides
- L17 ANSWER 39 OF 41 HCA COPYRIGHT 2003 ACS
 TI Synthesis of silicone-PMMA graft block copolymers using a
 poly(azo-containing siloxane amide) and their surface properties
- L17 ANSWER 40 OF 41 HCA COPYRIGHT 2003 ACS
 TI Electrophotographic color transfer imaging method
- L17 ANSWER 41 OF 41 HCA COPYRIGHT 2003 ACS
 TI Synthesis of silicone-vinyl block copolymers

=> d 117 9,11,17,19,23,29 cbib abs hitstr hitind

- L17 ANSWER 9 OF 41 HCA COPYRIGHT 2003 ACS
 134:256593 Polysiloxane block copolymers as bases for hair-styling
 preparations. Tsuchihashi, Koji; Uchiyama, Yujiro (Osaka Yuki
 Kagaku Kogyo Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP
 2001081018 A2 20010327, 11 pp. (Japanese). CODEN: JKXXAF.
 APPLICATION: JP 1999-256261 19990909.
- AB The hair-styling bases contain block copolymers prepd. by copolymn.
 of monomers including $\text{CH}_2\text{:CR}_1\text{COXR}_2\text{N+Me}_2\text{CH}_2\text{CO}_2\text{-}$ ($\text{X} = \text{O}, \text{NH}$; $\text{R}_1 = \text{H},$
 Me ; $\text{R}_2 = \text{C}_2\text{-3 alkylene}$) and ethylenically unsatd. carboxylate esters
 in the presence of polysiloxanes. The bases show good adhesion to
 hair, give good gloss to hair, and show hair-softening and
 -smoothing effects. A hair lotion contg. a block copolymer prepd.
 by polymn. of an azo-contg. dimethylpolysiloxane,
 methacryloyloxyethylenedimethylammonium carboxymethylbetaine,
 dimethylaminoethyl methacrylate, stearyl methacrylate, decyl

methacrylate, and dodecyl methacrylate and neutralization of the copolymer with lactic acid was formulated.

IT 331284-71-0P 331284-73-2P 331284-75-4P
 331284-77-6P 331284-79-8P 331284-80-1P
 331284-82-3P 331284-84-5P 331413-38-8P
 331413-42-4P
 (prepn. of betaine-contg. polysiloxane block copolymers as bases for hair-styling preps.)

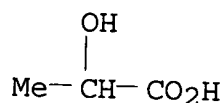
RN 331284-71-0 HCA

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 4,4'-azobis[4-cyanopentanoic acid], decyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate, block, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5

CMF C3 H6 O3



CM 2

CRN 331284-70-9

CMF (C22 H42 O2 . C16 H30 O2 . C14 H26 O2 . C12 H16 N4 O4 . C10 H17 N O4 . C8 H15 N O2 . (C2 H6 O Si)n C10 H28 N2 O Si2)x

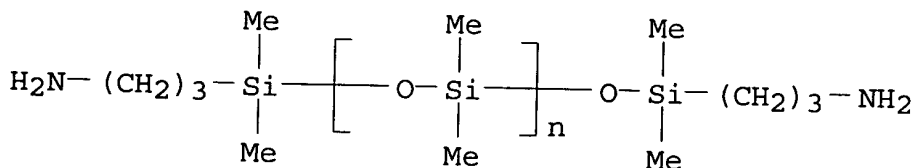
CCI PMS

CM 3

CRN 97917-34-5

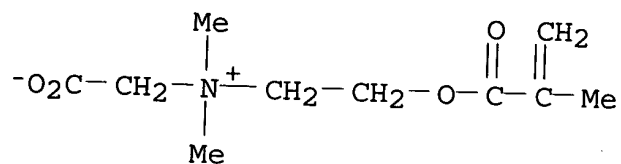
CMF (C2 H6 O Si)n C10 H28 N2 O Si2

CCI PMS



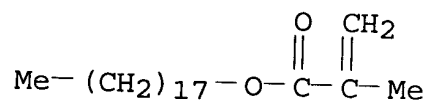
CM 4

CRN 62723-61-9
 CMF C10 H17 N O4



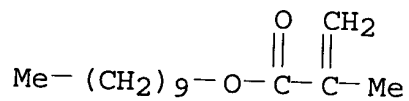
CM 5

CRN 32360-05-7
 CMF C22 H42 O2



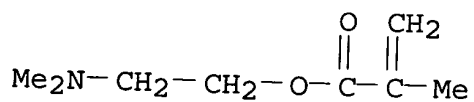
CM 6

CRN 3179-47-3
 CMF C14 H26 O2



CM 7

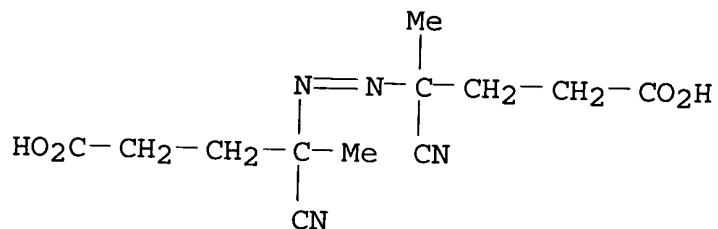
CRN 2867-47-2
 CMF C8 H15 N O2



CM 8

CRN 2638-94-0

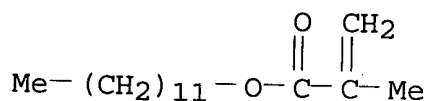
CMF C12 H16 N4 O4



CM 9

CRN 142-90-5

CMF C16 H30 O2



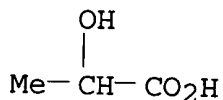
RN 331284-73-2 HCA

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], 4,4'-azobis[4-cyanopentanoic acid], decyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate, ethyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate, block, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5

CMF C3 H6 O3



CM 2

CRN 331284-72-1

CMF (C22 H42 O2 . C16 H30 O2 . C14 H26 O2 . C12 H16 N4 O4 . C10 H17
N O4 . C8 H15 N O2 . C6 H10 O2 . (C2 H6 O Si)n C10 H28 N2 O
Si2)x

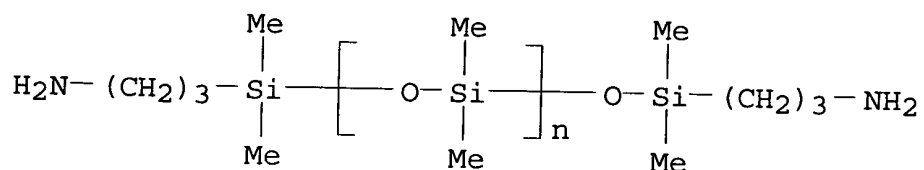
CCI PMS

CM 3

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

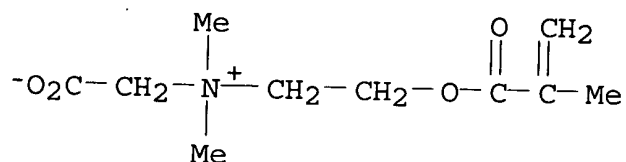
CCI PMS



CM 4

CRN 62723-61-9

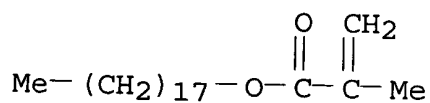
CMF C10 H17 N O4



CM 5

CRN 32360-05-7

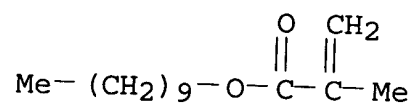
CMF C22 H42 O2



CM 6

CRN 3179-47-3

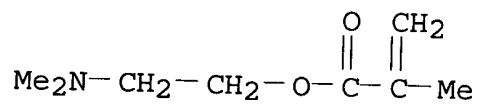
CMF C14 H26 O2



CM 7

CRN 2867-47-2

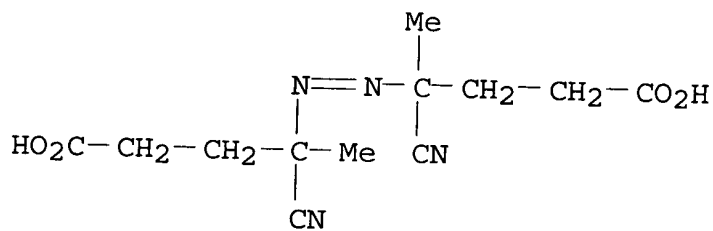
CMF C8 H15 N O2



CM 8

CRN 2638-94-0

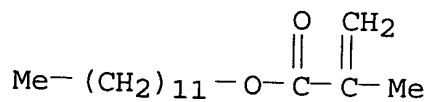
CMF C12 H16 N4 O4



CM 9

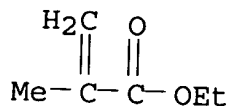
CRN 142-90-5

CMF C16 H30 O2



CM 10

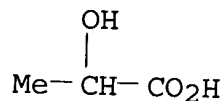
CRN 97-63-2
CMF C6 H10 O2



RN 331284-75-4 HCA
CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 4,4'-azobis[4-cyanopentanoic acid], decyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate, block, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5
CMF C3 H6 O3

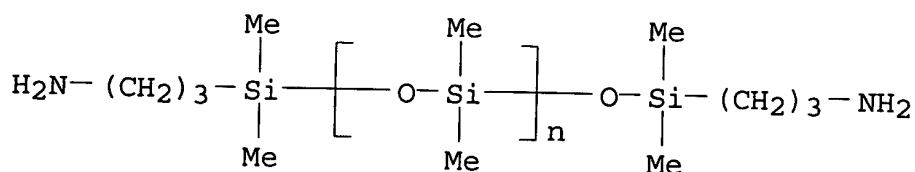


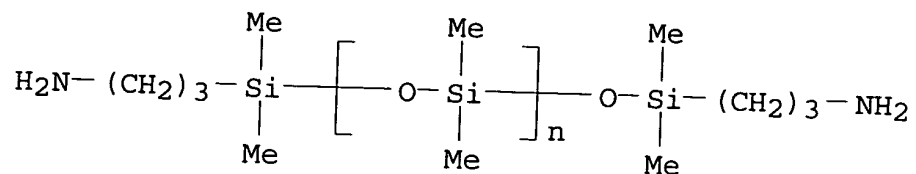
CM 2

CRN 331284-74-3
CMF (C22 H42 O2 . C16 H30 O2 . C14 H26 O2 . C12 H16 N4 O4 . C10 H17 N O4 . C8 H15 N O2 . C6 H10 O3 . (C2 H6 O Si)n C10 H28 N2 O Si2)x
CCI PMS

CM 3

CRN 97917-34-5
CMF (C2 H6 O Si)n C10 H28 N2 O Si2
CCI PMS

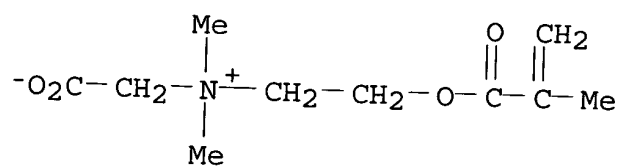




CM 4

CRN 62723-61-9

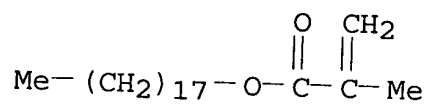
CMF C10 H17 N O4



CM 5

CRN 32360-05-7

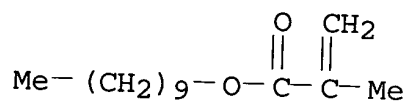
CMF C22 H42 O2



CM 6

CRN 3179-47-3

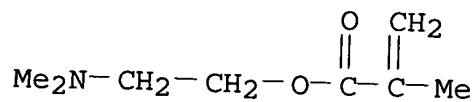
CMF C14 H26 O2



CM 7

CRN 2867-47-2

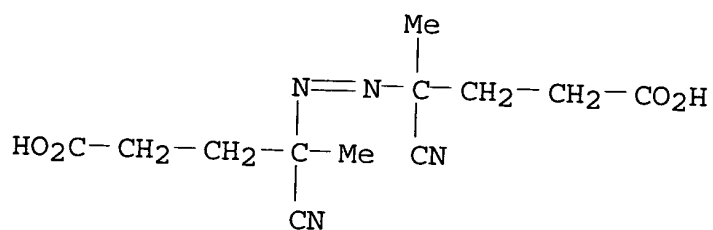
CMF C8 H15 N O2



CM 8

CRN 2638-94-0

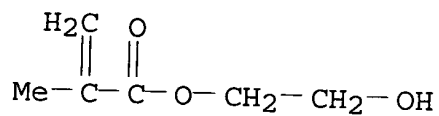
CMF C12 H16 N4 O4



CM 9

CRN 868-77-9

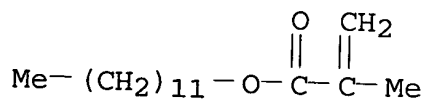
CMF C6 H10 O3



CM 10

CRN 142-90-5

CMF C16 H30 O2



RN 331284-77-6 HCA

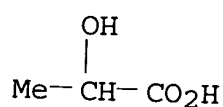
CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with .alpha.-[(3-

aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 4,4'-azobis[4-cyanopentanoic acid], decyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, dodecyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate, block, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5

CMF C3 H6 O3



CM 2

CRN 331284-76-5

CMF (C22 H42 O2 . C16 H30 O2 . C14 H26 O2 . C12 H16 N4 O4 . C10 H17 N O4 . C9 H15 N O2 . C8 H15 N O2 . (C2 H6 O Si)n C10 H28 N2 O Si2)x

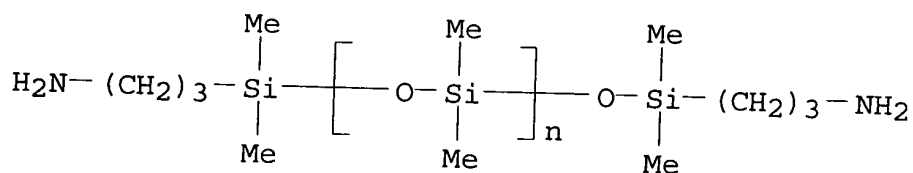
CCI PMS

CM 3

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

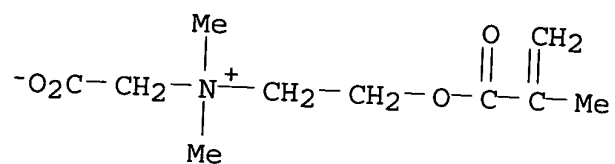
CCI PMS



CM 4

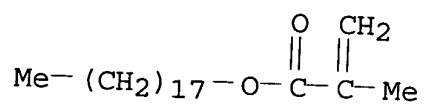
CRN 62723-61-9

CMF C10 H17 N O4



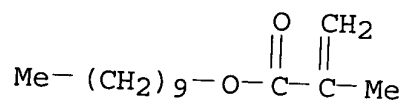
CM 5

CRN 32360-05-7
CMF C22 H42 O2



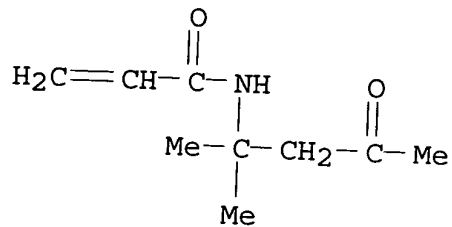
CM 6

CRN 3179-47-3
CMF C14 H26 O2



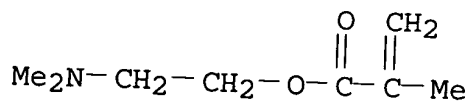
CM 7

CRN 2873-97-4
CMF C9 H15 N O2



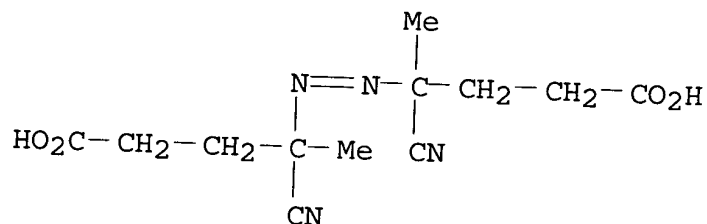
CM 8

CRN 2867-47-2
CMF C8 H15 N O2



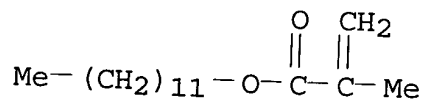
CM 9

CRN 2638-94-0
CMF C12 H16 N4 O4



CM 10

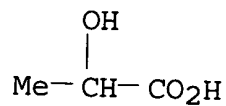
CRN 142-90-5
CMF C16 H30 O2



RN 331284-79-8 HCA
CN 1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, inner salt, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 4,4'-azobis[4-cyanopentanoic acid], N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium inner salt, decyl 2-methyl-2-propenoate, N-[(dimethylamino)propyl]-2-methyl-2-propenamide, 1,1-dimethylethyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate, block, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5
CMF C3 H6 O3

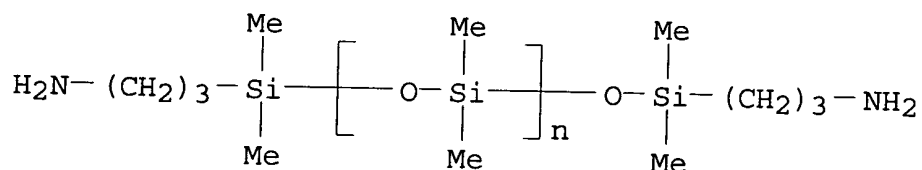


CM 2

CRN 331284-78-7
CMF (C22 H42 O2 . C16 H30 O2 . C14 H26 O2 . C12 H16 N4 O4 . C11 H20 N2 O3 . C10 H18 N2 O3 . C9 H18 N2 O . C8 H14 O2 . (C2 H6 O Si)n C10 H28 N2 O Si2)x
CCI PMS

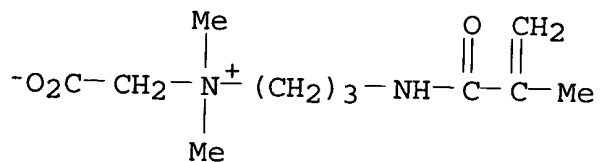
CM 3

CRN 97917-34-5
CMF (C2 H6 O Si)n C10 H28 N2 O Si2
CCI PMS



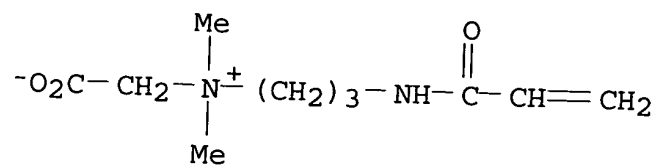
CM 4

CRN 83623-26-1
CMF C11 H20 N2 O3



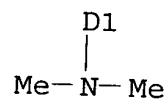
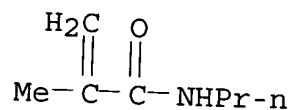
CM 5

CRN 79702-44-6
CMF C10 H18 N2 O3



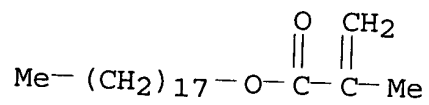
CM 6

CRN 67296-21-3
 CMF C9 H18 N2 O
 CCI IDS



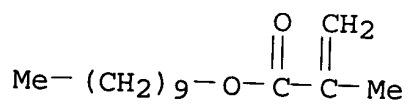
CM 7

CRN 32360-05-7
 CMF C22 H42 O2



CM 8

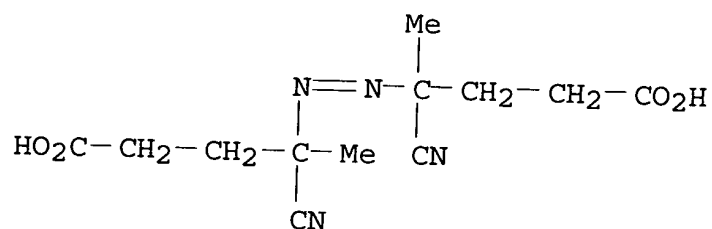
CRN 3179-47-3
 CMF C14 H26 O2



CM 9

CRN 2638-94-0

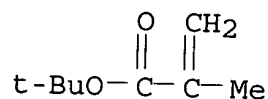
CMF C12 H16 N4 O4



CM 10

CRN 585-07-9

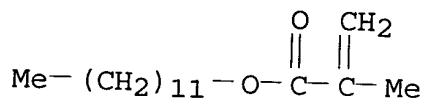
CMF C8 H14 O2



CM 11

CRN 142-90-5

CMF C16 H30 O2



RN 331284-80-1 HCA

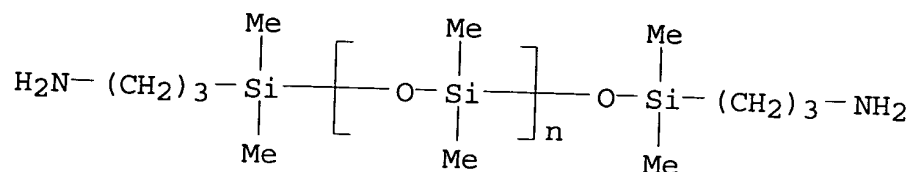
CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], 4,4'-azobis[4-cyanopentanoic acid], decyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate, N-ethyl-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium ethyl sulfate, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-ethanediyl) and octadecyl 2-methyl-2-propenoate, block, graft (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

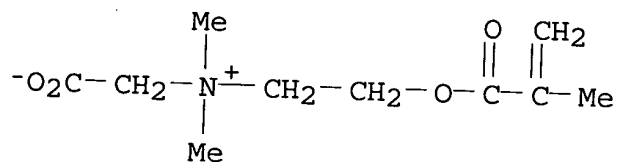
CCI PMS



CM 2

CRN 62723-61-9

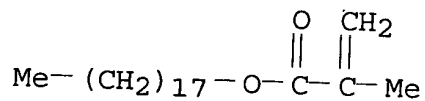
CMF C10 H17 N O4



CM 3

CRN 32360-05-7

CMF C22 H42 O2

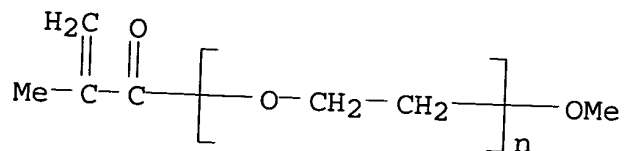


CM 4

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

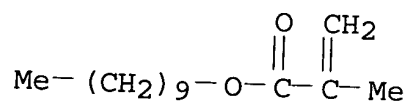
CCI PMS



CM 5

CRN 3179-47-3

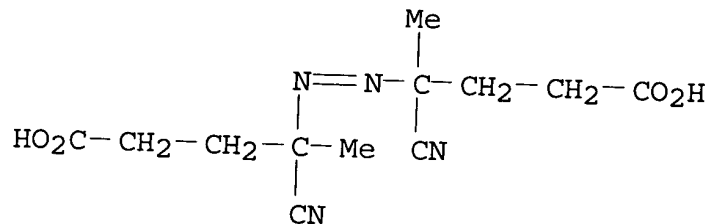
CMF C14 H26 O2



CM 6

CRN 2638-94-0

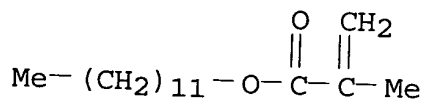
CMF C12 H16 N4 O4



CM 7

CRN 142-90-5

CMF C16 H30 O2



CM 8

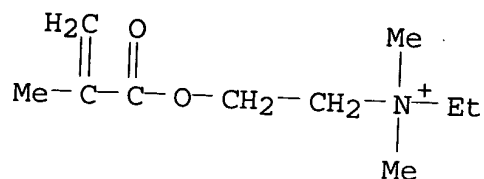
CRN 13223-03-5

CMF C10 H20 N O2 . C2 H5 O4 S

CM 9

CRN 48063-69-0

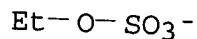
CMF C10 H20 N O2



CM 10

CRN 48028-76-8

CMF C2 H5 O4 S



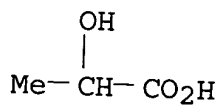
RN 331284-82-3 HCA

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], 4,4'-azobis[4-cyanopentanoic acid], decyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate, N-ethenylacetamide, 1-ethenyl-2-pyrrolidinone and octadecyl 2-methyl-2-propenoate, block, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5

CMF C3 H6 O3



CM 2

CRN 331284-81-2

CMF (C22 H42 O2 . C16 H30 O2 . C14 H26 O2 . C12 H16 N4 O4 . C10 H17
N O4 . C8 H15 N O2 . C6 H9 N O . C4 H7 N O . (C2 H6 O Si)n C10
H28 N2 O Si2)x

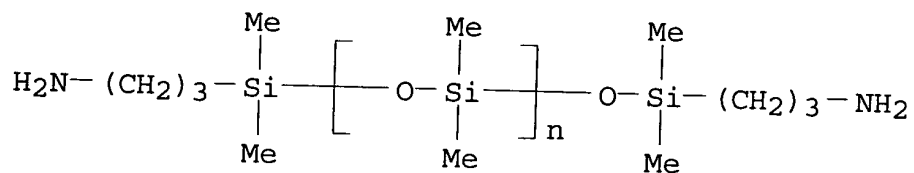
CCI PMS

CM 3

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

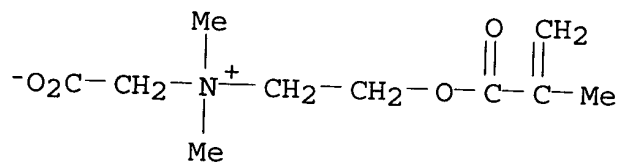
CCI PMS



CM 4

CRN 62723-61-9

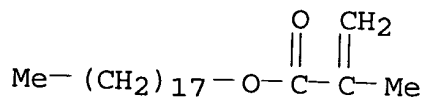
CMF C10 H17 N O4



CM 5

CRN 32360-05-7

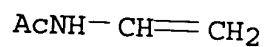
CMF C22 H42 O2



CM 6

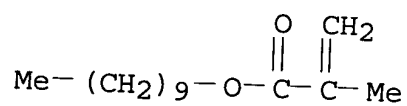
CRN 5202-78-8

CMF C4 H7 N O



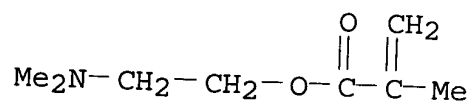
CM 7

CRN 3179-47-3
CMF C14 H26 O2



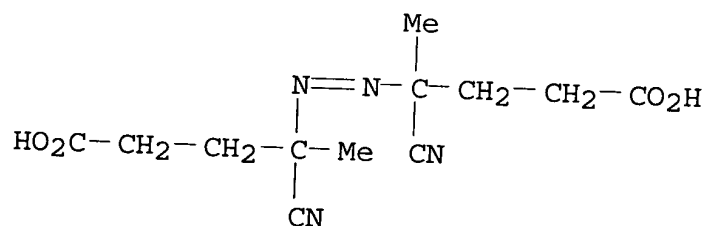
CM 8

CRN 2867-47-2
CMF C8 H15 N O2



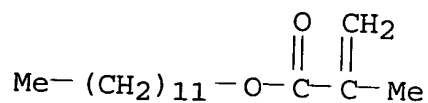
CM 9

CRN 2638-94-0
CMF C12 H16 N4 O4



CM 10

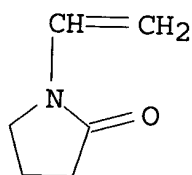
CRN 142-90-5
CMF C16 H30 O2



CM 11

CRN 88-12-0

CMF C6 H9 N O



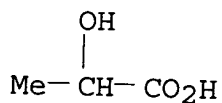
RN 331284-84-5 HCA

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 4,4'-azobis[4-cyanopentanoic acid], butyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate and ethyl 2-methyl-2-propenoate, block, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5

CMF C3 H6 O3



CM 2

CRN 331284-83-4

CMF (C12 H16 N4 O4 . C10 H17 N O4 . C8 H15 N O2 . C8 H14 O2 . C6 H10 O2 . (C2 H6 O Si)n C10 H28 N2 O Si2)x

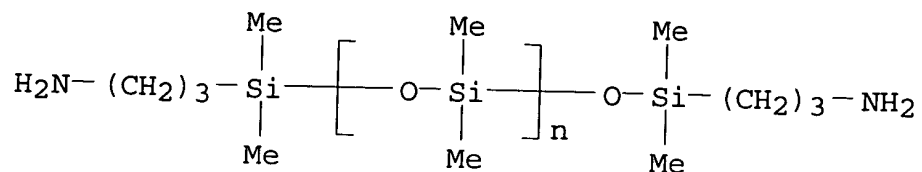
CCI PMS

CM 3

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

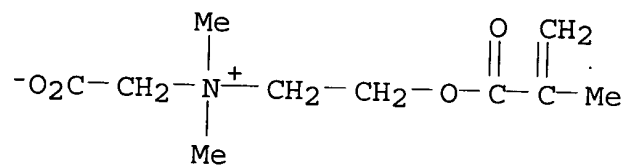
CCI PMS



CM 4

CRN 62723-61-9

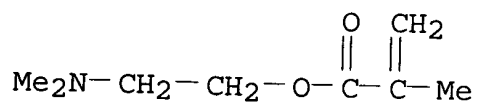
CMF C10 H17 N O4



CM 5

CRN 2867-47-2

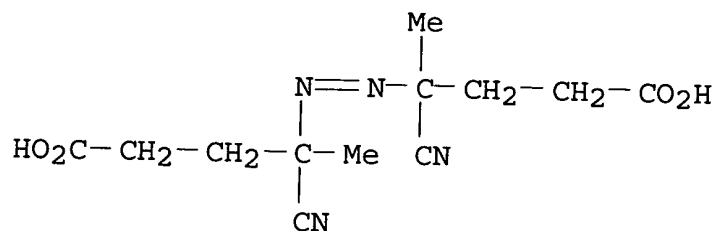
CMF C8 H15 N O2



CM 6

CRN 2638-94-0

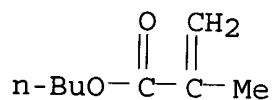
CMF C12 H16 N4 O4



CM 7

CRN 97-88-1

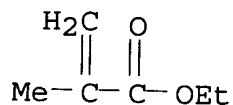
CMF C8 H14 O2



CM 8

CRN 97-63-2

CMF C6 H10 O2



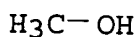
RN 331413-38-8 HCA

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 4,4'-azobis[4-cyanopentanoic acid], decyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate, N-ethyl-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium ethyl sulfate, octadecyl 2-methyl-2-propenoate and oxirane, methyl ether, block, graft (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1

CMF C H4 O



H₃C-OH

CM 2

CRN 331413-37-7

CMF (C22 H42 O2 . C16 H30 O2 . C14 H26 O2 . C12 H16 N4 O4 . C10 H20
N O2 . C10 H17 N O4 . (C2 H6 O Si)n C10 H28 N2 O Si2 . C2 H5 O4
S . C2 H4 O)x

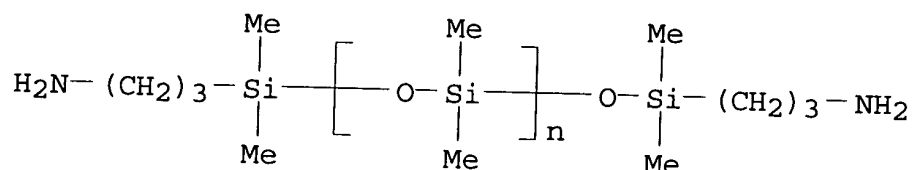
CCI PMS

CM 3

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

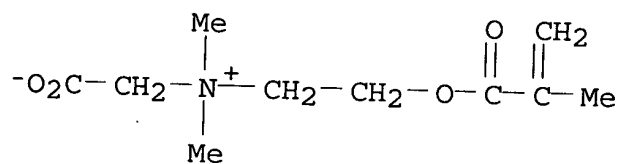
CCI PMS



CM 4

CRN 62723-61-9

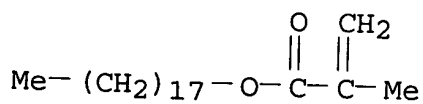
CMF C10 H17 N O4



CM 5

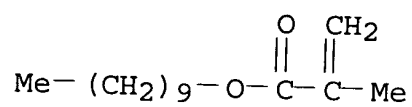
CRN 32360-05-7

CMF C22 H42 O2



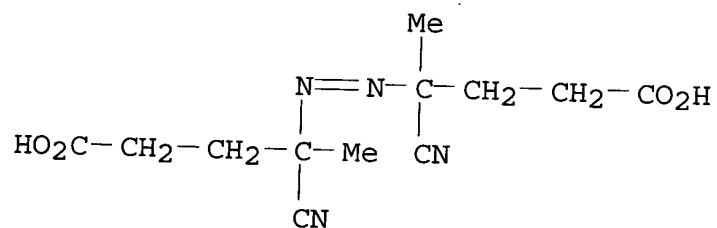
CM 6

CRN 3179-47-3
 CMF C14 H26 O2



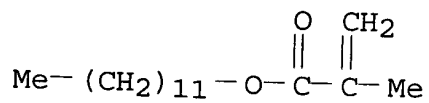
CM 7

CRN 2638-94-0
 CMF C12 H16 N4 O4



CM 8

CRN 142-90-5
 CMF C16 H30 O2



CM 9

CRN 75-21-8
 CMF C2 H4 O



CM 10

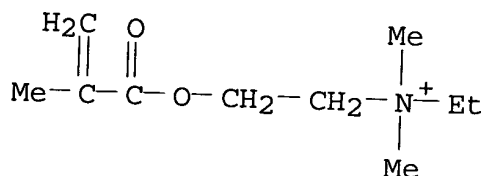
CRN 13223-03-5

CMF C10 H20 N O2 . C2 H5 O4 S

CM 11

CRN 48063-69-0

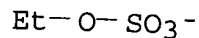
CMF C10 H20 N O2



CM 12

CRN 48028-76-8

CMF C2 H5 O4 S



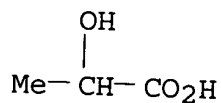
RN 331413-42-4 HCA

CN 1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxo-2-propenyl)amino]-, inner salt, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 4,4'-azobis[4-cyanopentanoic acid], N-[3-(dimethylamino)propyl]-2-propenamide, N-(1,1-dimethylethyl)-2-propenamide, 1,1-dimethylethyl 2-propenoate and 1,2-propanediol mono-2-propenoate, block, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5

CMF C3 H6 O3



CM 2

CRN 331413-41-3

CMF (C12 H16 N4 O4 . C10 H18 N2 O3 . C8 H16 N2 O . C7 H13 N O . C7
H12 O2 . C6 H10 O3 . (C2 H6 O Si)n C10 H28 N2 O Si2)x

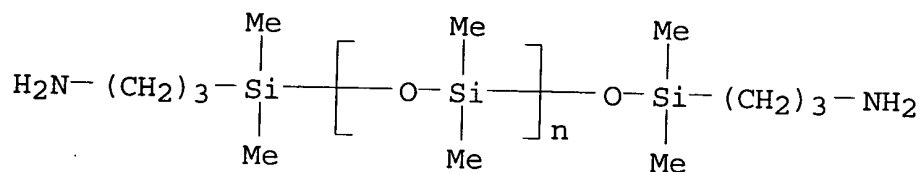
CCI PMS

CM 3

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

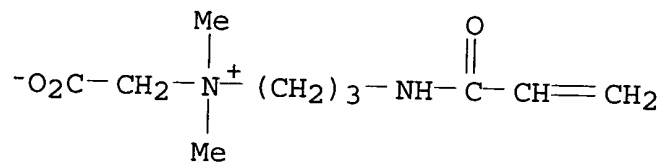
CCI PMS



CM 4

CRN 79702-44-6

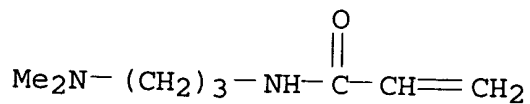
CMF C10 H18 N2 O3



CM 5

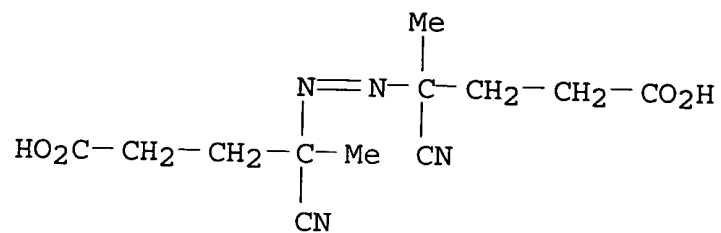
CRN 3845-76-9

CMF C8 H16 N2 O



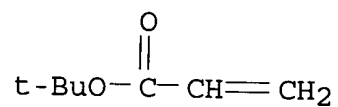
CM 6

CRN 2638-94-0
CMF C12 H16 N4 O4



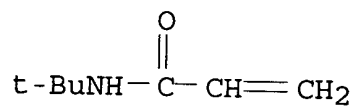
CM 7

CRN 1663-39-4
CMF C7 H12 O2



CM 8

CRN 107-58-4
CMF C7 H13 N O

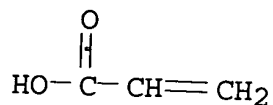


CM 9

CRN 25584-83-2
CMF C6 H10 O3
CCI IDS

CM 10

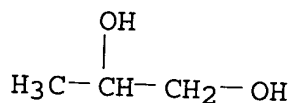
CRN 79-10-7
CMF C3 H4 O2



CM 11

CRN 57-55-6

CMF C3 H8 O2



- IC ICM A61K007-11
ICS C08F283-12; C08F293-00
- CC 62-3 (Essential Oils and Cosmetics)
Section cross-reference(s): 35
- IT 331284-71-0P 331284-73-2P 331284-75-4P
331284-77-6P 331284-79-8P 331284-80-1P
331284-82-3P 331284-84-5P 331413-38-8P
331413-42-4P
(prepn. of betaine-contg. polysiloxane block copolymers as bases
for hair-styling preps.)
- L17 ANSWER 11 OF 41 HCA COPYRIGHT 2003 ACS
- 133:209405 Weather-resistant acrylic polysiloxane aqueous dispersion
coatings and their manufacture. Nijikken, Toshihiko (Daicel
Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP
2000239598 A2 20000905, 5 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1999-42256 19990219.
- AB Title coatings are prepd. by emulsion polyimg. ethylenic unsatd.
compds. 70-99.4, and hydrophilic ethylenic unsatd. compds. 0.1-10 in
the presence of polysiloxane-contg. azo initiators 0.5-20% in aq.
solns. contg. surfactants. Emulsion polyimg. acrylic acid, Bu
acrylate, and Me methacrylate in aq. soln. contg. VPS 1001 and
Aqalon HS 1025 gave an emulsion, which was dild. and coated on a
slate plate to form a film showing good adhesion initially and after
freeze/thaw test (ASTM C 666, 40 cycles) and gloss retention 98%
after 600 h under super UV tester.
- IT 158947-07-0, VPS 1001
(polymn. of acrylic compds. in presence of polysiloxane azo
compds. for aq. dispersion coatings with weather resistance)
- RN 158947-07-0 HCA
- CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] (9CI) (CA

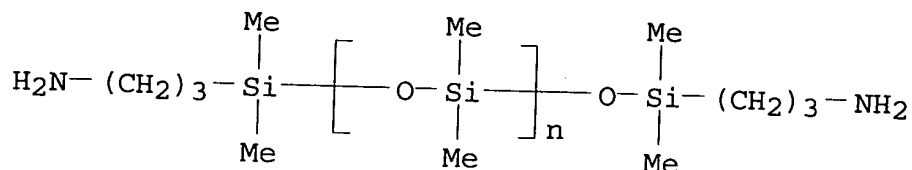
INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

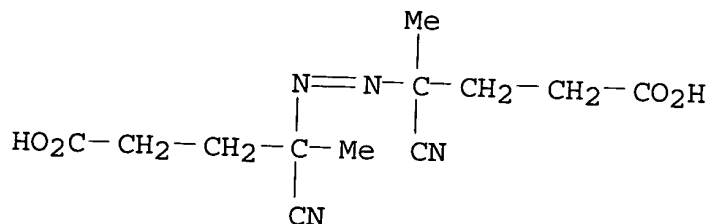
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C09D133-08

ICS C08F002-16; C09D005-02

CC 42-10 (Coatings, Inks, and Related Products)

IT 158947-07-0, VPS 1001

(polymn. of acrylic compds. in presence of polysiloxane azo compds. for aq. dispersion coatings with weather resistance)

L17 ANSWER 17 OF 41 HCA COPYRIGHT 2003 ACS

131:273237 Storage-stable curable water emulsions for coatings with good stain and water resistance. Ohmura, Takuya; Inukai, Hiroshi; Hasegawa, Mitsutaka; Tsuda, Takashi; Yamamura, Takehisa (Toa Gosei Chemical Industry Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11279364 A2 19991012 Heisei, 15 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-195023 19980625. PRIORITY: JP 1998-30610 19980128.

AB Title emulsions coatings, particularly useful for building materials such as concretes, comprises (A) an alkoxysilyl-contg. (meth)acrylic copolymer (e.g., Aqualon HS 20-Bu acrylate-2-hydroxyethyl methacrylate-Me methacrylate-.gamma.-methacryloxypropyltriethoxysila

ne copolymer) (B) a hydrolyzable silane compd. (e.g., hexyltriethoxysilane), and (C) a block copolymer dispersants prepd. by radical polymn. of polyoxyalkylene (meth)acrylate-based monomers in the presence of radical polymn. initiators having polydimethylsiloxane and azo groups in the main chains (M 230G-VPS 0501 block copolymer).

IT 242816-03-1P, NK Ester AM 90G-2-hydroxyethyl acrylate-VPS 0501 block copolymer 243659-20-3P, M 230G-VPS 0501 block copolymer 243659-21-4P, M 230G-.gamma.-Methacryloxypropyltriethoxysilane-VPS 1001 block copolymer (curable acrylic polysiloxanes emulsion coatings with good stain and water resistance and storage stability)

RN 242816-03-1 HCA

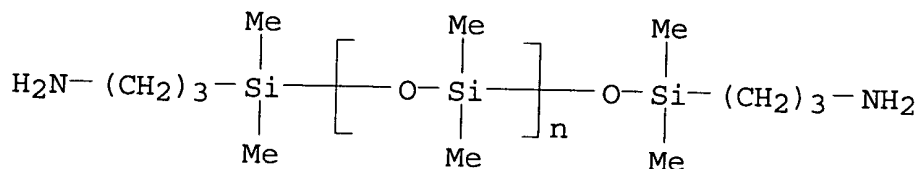
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 2-hydroxyethyl 2-propenoate and .alpha.-(1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-ethanediyl), block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS

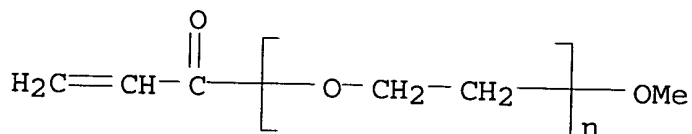


CM 2

CRN 32171-39-4

CMF (C2 H4 O)_n C4 H6 O2

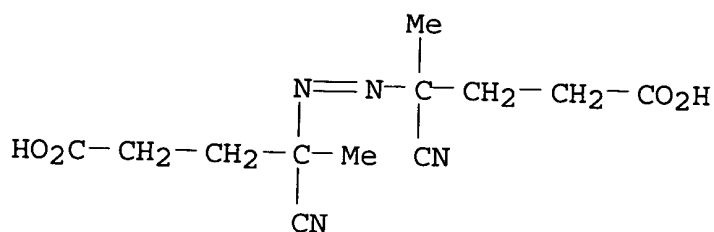
CCI PMS



CM 3

CRN 2638-94-0

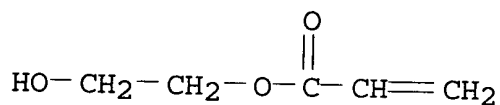
CMF C12 H16 N4 O4



CM 4

CRN 818-61-1

CMF C5 H8 O3



RN 243659-20-3 HCA

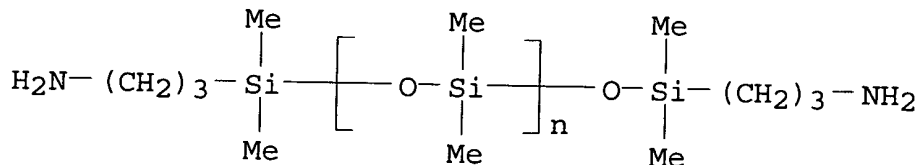
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[(3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] and
 .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-
 ethanediyl), block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS

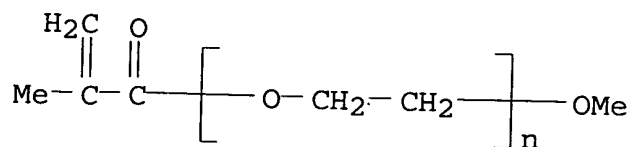


CM 2

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

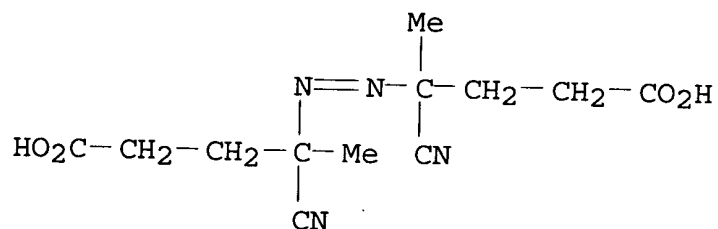
CCI PMS



CM 3

CRN 2638-94-0

CMF C12 H16 N4 O4



RN 243659-21-4 HCA

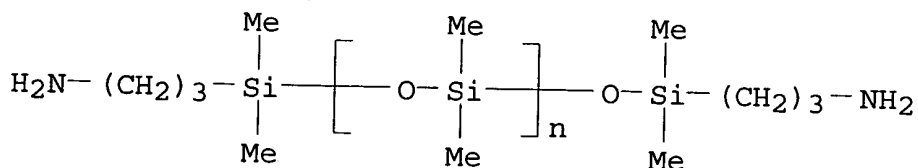
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[(3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],
 .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-
 ethanediyl) and 3-(triethoxysilyl)propyl 2-methyl-2-propenoate,
 block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS

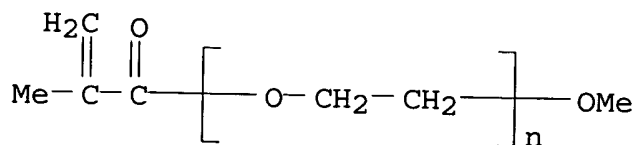


CM 2

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

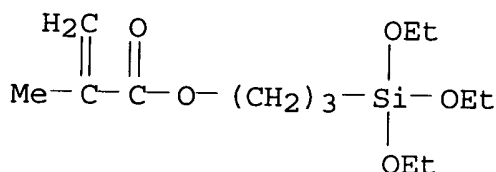
CCI PMS



CM 3

CRN 21142-29-0

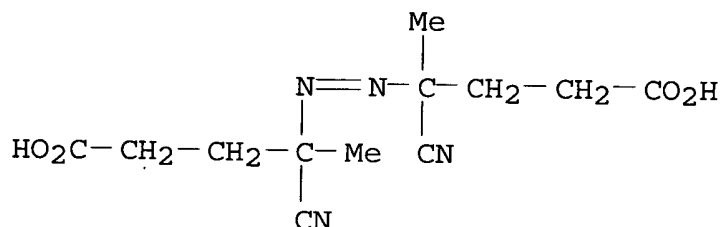
CMF C13 H26 O5 Si



CM 4

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C08L033-04

CC ICS C09D005-00; C09D133-04; C08F004-04; C08F299-02; C08L055-00
42-10 (Coatings, Inks, and Related Products)

IT Section cross-reference(s): 58

157445-38-0P, Hexyltriethoxysilane polymer, ladder sru
 158808-35-6P, Hexyltriethoxysilane homopolymer **242816-03-1P**
 , NK Ester AM 90G-2-hydroxyethyl acrylate-VPS 0501 block copolymer
243659-20-3P, M 230G-VPS 0501 block copolymer
243659-21-4P, M 230G-.gamma.-Methacryloxypropyltriethoxysila
 ne-VPS 1001 block copolymer

(curable acrylic polysiloxanes emulsion coatings with good stain
 and water resistance and storage stability)

L17 ANSWER 19 OF 41 HCA COPYRIGHT 2003 ACS

131:158917 Curable emulsions for coatings with excellent stain resistance. Ohmura, Takuya; Inukai, Hiroshi; Tsuda, Takashi; Yamamura, Takehisa (Toa Gosei Chemical Industry Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11217480 A2 19990810 Heisei, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-189693 19980619. PRIORITY: JP 1997-343687 19971128.

AB Title aq. emulsions contain 100 parts copolymers composed of (a) radically polymerizable monomers contg. alkoxysilyl groups, (b) copolymerizable monomers, and (c) radically polymerizable surfactants Z(AO)nY (Z = org. group contg. radically polymerizable double bond; AO = oxyalkylene; n .gtoreq.2; Y = ionic leaving group), and 0.1-30 parts block copolymer dispersants prepd. by radical polymn. of monomers mainly composed of polyoxyalkylene (meth)acrylate in the presence of radical polymn. initiators bearing polydimethylsiloxane and azo groups in the main chains. Thus, radical polymn. of a mixt. contg. .gamma.-methacryloxypropyltriethoxysilane 10, Me methacrylate 50, Bu acrylate 30, 2-hydroxyethyl acrylate 10, and Aqualon HS20 (reactive surfactant) 2 parts in H2O gave an emulsion. Then, 100 parts of the emulsion and 15 parts of a block copolymer prepd. by polymg. M230G (methoxypolyoxyethylene glycol methacrylate) in the presence of VPS 0501 (polymeric azo compd.) were mixed to give a storage-stable curable emulsion, which was applied on a primed Al plate and cured at room temp. for 1 wk to give coatings showing good solvent, stain, and weather resistance.

IT 236735-84-5P, Ethylene oxide-VPS 0501 block copolymer
236735-86-7P 236735-88-9P 242816-03-1P
243659-20-3P, M 230G-VPS 0501 block copolymer
243659-21-4P, M 230G-.gamma.-Methacryloxypropyltriethoxysilane-VPS 1001 block copolymer
(curable aq. emulsions of acrylic polysiloxanes for stain-resistant coatings)

RN 236735-84-5 HCA

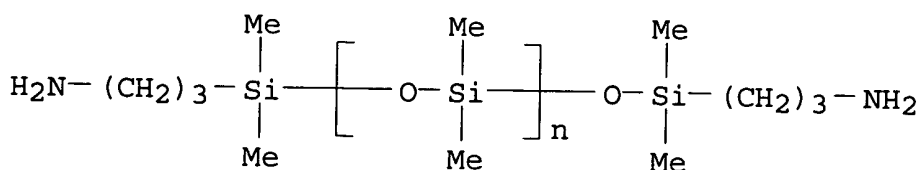
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] and oxirane, block (9CI) (CA INDEX NAME)

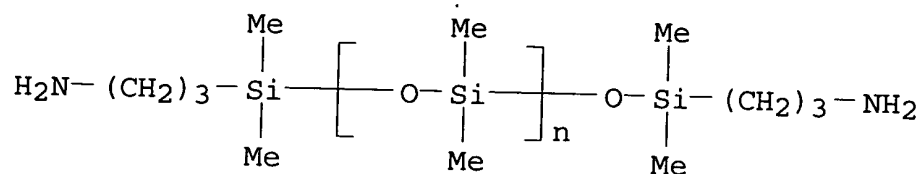
CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

CCI PMS

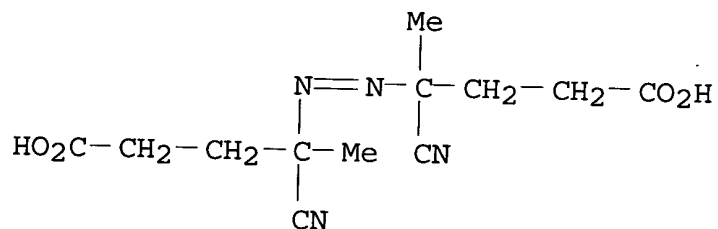




CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



CM 3

CRN 75-21-8

CMF C2 H4 O



RN 236735-86-7 HCA

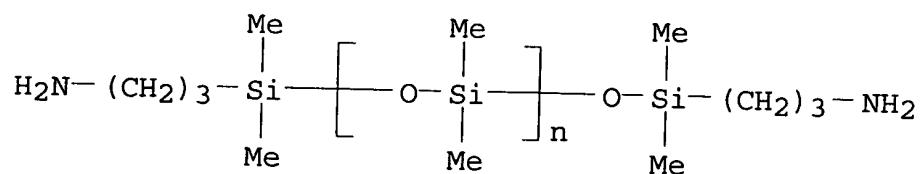
CN 2-Propenoic acid, 2-methyl-, 3-(triethoxysilyl)propyl ester, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], 4,4'-azobis[4-cyanopentanoic acid] and oxirane, block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

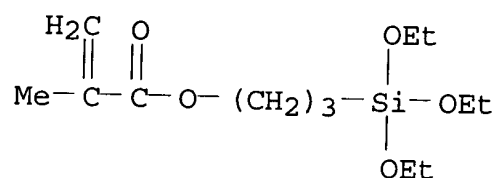
CCI PMS



CM 2

CRN 21142-29-0

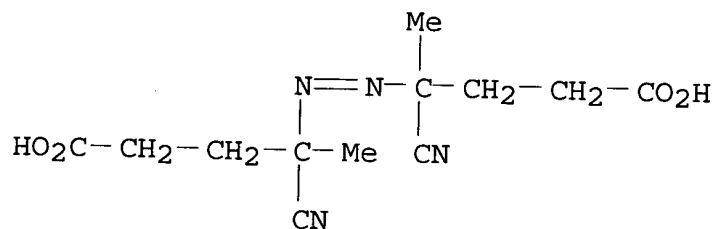
CMF C13 H26 O5 Si



CM 3

CRN 2638-94-0

CMF C12 H16 N4 O4



CM 4

CRN 75-21-8

CMF C2 H4 O



RN 236735-88-9 HCA

CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with

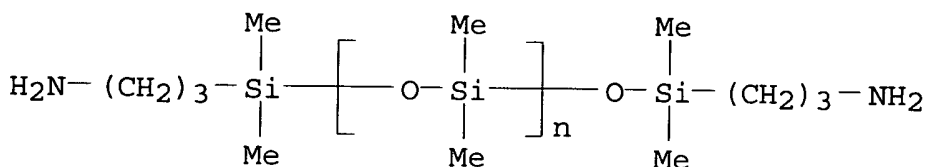
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 4,4'-azobis[4-cyanopentanoic acid] and oxirane, block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

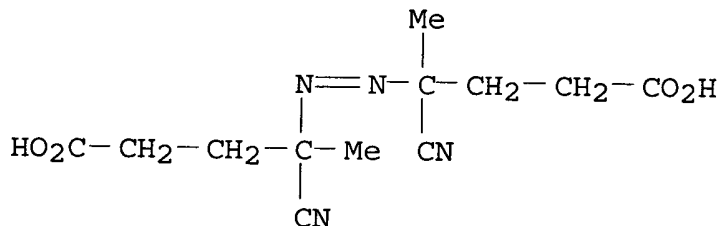
CCI PMS



CM 2

CRN 2638-94-0

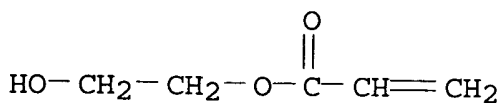
CMF C12 H16 N4 O4



CM 3

CRN 818-61-1

CMF C5 H8 O3



CM 4

CRN 75-21-8

CMF C2 H4 O



RN 242816-03-1 HCA

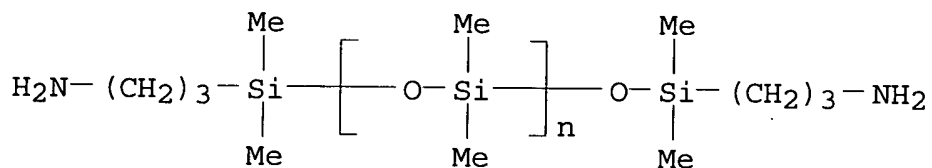
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],
 2-hydroxyethyl 2-propenoate and .alpha.-(1-oxo-2-propenyl)-.omega.-
 methoxypoly(oxy-1,2-ethanediyl), block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS

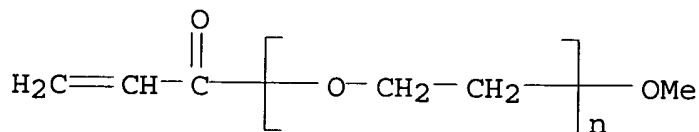


CM 2

CRN 32171-39-4

CMF (C2 H4 O)_n C4 H6 O2

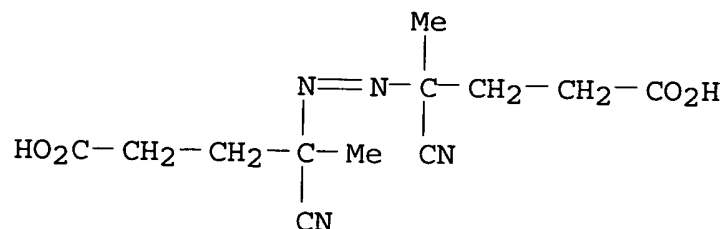
CCI PMS



CM 3

CRN 2638-94-0

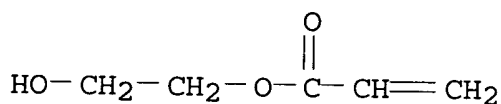
CMF C12 H16 N4 O4



CM 4

CRN 818-61-1

CMF C5 H8 O3



RN 243659-20-3 HCA

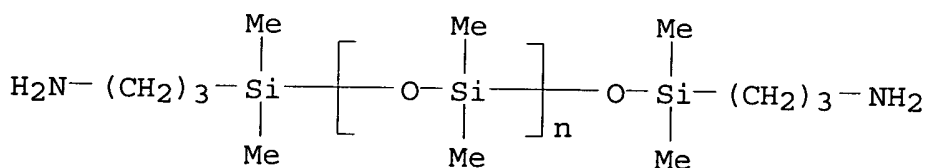
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[(3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] and
 .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-
 ethanediyl), block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS

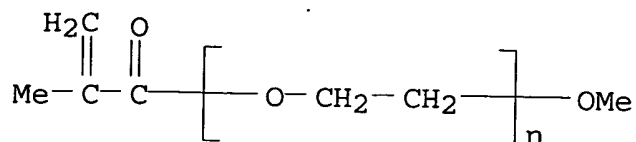


CM 2

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

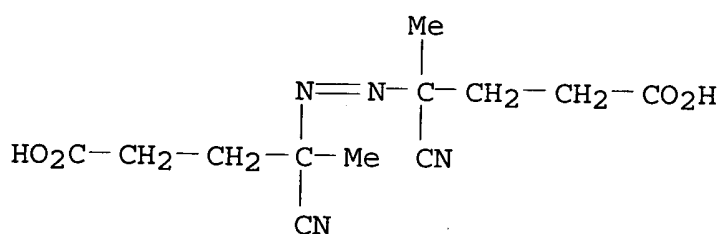
CCI PMS



CM 3

CRN 2638-94-0

CMF C12 H16 N4 O4



RN 243659-21-4 HCA

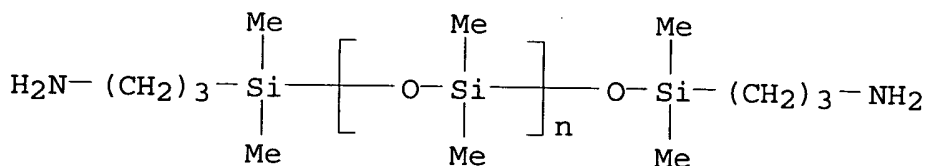
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]],
 .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly[oxy-1,2-ethanediyl] and 3-(triethoxysilyl)propyl 2-methyl-2-propenoate,
 block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS

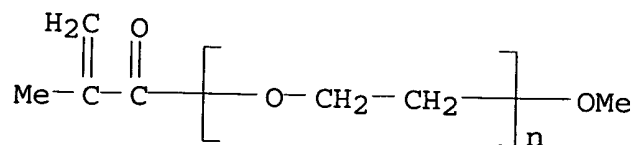


CM 2

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

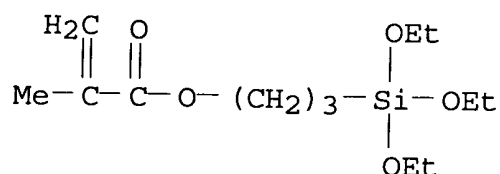
CCI PMS



CM 3

CRN 21142-29-0

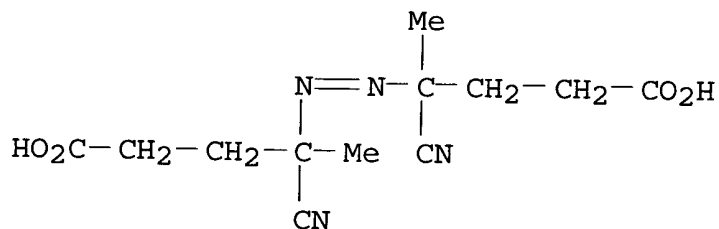
CMF C13 H26 O5 Si



CM 4

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C08L043-04

ICS C08F230-08; C08L033-14; C09D133-14; C09D143-04; C08F002-24;
C08F004-04; C08L043-04; C08L053-00

CC 42-10 (Coatings, Inks, and Related Products)

IT 236735-84-5P, Ethylene oxide-VPS 0501 block copolymer

236735-86-7P 236735-88-9P 242816-03-1P

243659-20-3P, M 230G-VPS 0501 block copolymer

243659-21-4P, M 230G-.gamma.-Methacryloxypropyltriethoxysila
ne-VPS 1001 block copolymer(curable aq. emulsions of acrylic polysiloxanes for
stain-resistant coatings)

128:193305 Cured materials of unsaturated polyester resin. Agari, Yasuyuki; Shimada, Masayuki; Ueda, Akira; Takeuchi, Hideo; Shimamura, Nobutaka (Wako Pure Chemical Industries, Ltd., Japan; Osaka Municipal Government). Eur. Pat. Appl. EP 826730 A2 19980304, 24 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI. (English). CODEN: EPXXDW. APPLICATION: EP 1997-114975 19970829. PRIORITY: JP 1996-252488 19960902.

AB An unsatd. polyester resin compn. contains a silicone-contg. macro-azo-initiator and/or a silicone-contg. block copolymer obtained by copolymg. the silicone-contg. macro-azo-initiator with a nonionic monomer. The cured polyesters have good water repellency, weathering resistance, chem. resistance, antistaining properties, adhesion, etc. An initiator was prepd. by polymn. of KF 8012 and V-501, and a block copolymer was prepd. by polymn. of the initiator and Me methacrylate.

IT 181434-99-1P 203648-07-1P 203648-10-6P
203648-12-8P 203648-14-0P

(cured materials of unsatd. polyester resin)

RN 181434-99-1 HCA

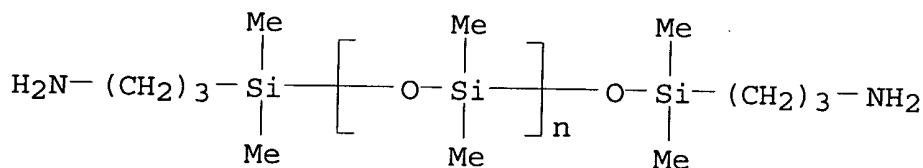
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] and methyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

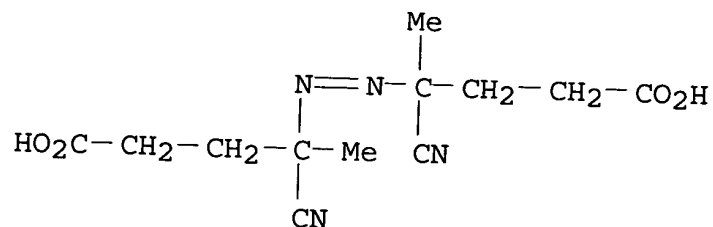
CCI PMS



CM 2

CRN 2638-94-0

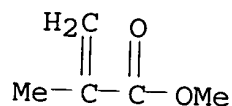
CMF C12 H16 N4 O4



CM 3

CRN 80-62-6

CMF C5 H8 O2



RN 203648-07-1 HCA

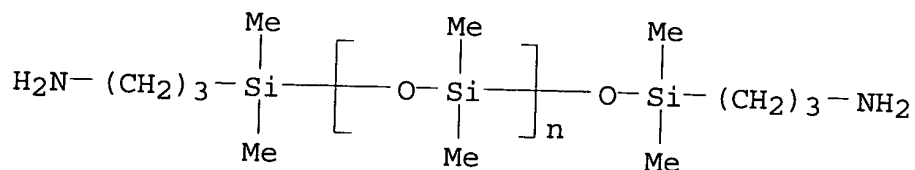
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], butyl
 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, block (9CI)
 (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

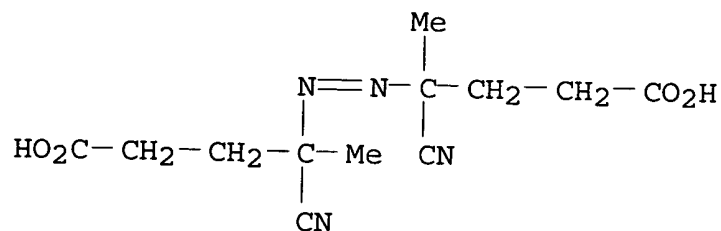
CCI PMS



CM 2

CRN 2638-94-0

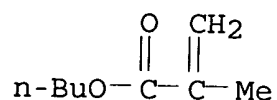
CMF C12 H16 N4 O4



CM 3

CRN 97-88-1

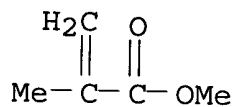
CMF C8 H14 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



RN 203648-10-6 HCA

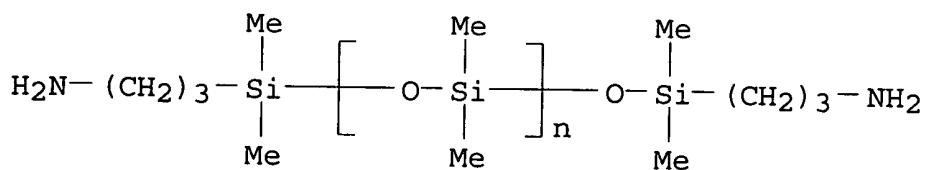
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] and ethenylbenzene, block (9CI) (CA INDEX NAME)

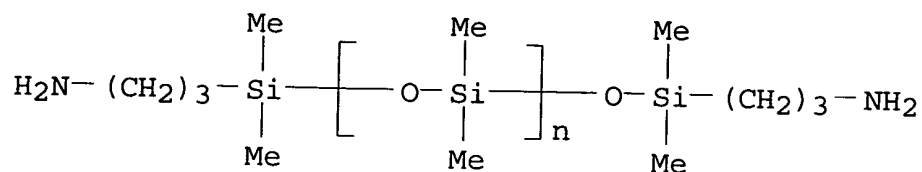
CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS

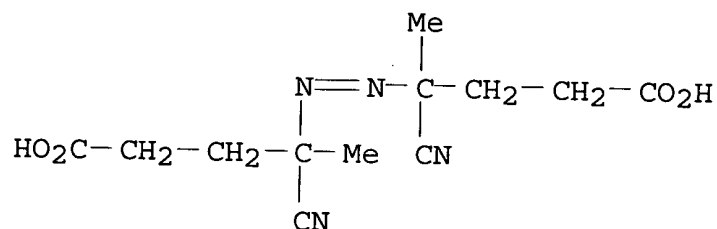




CM 2

CRN 2638-94-0

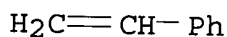
CMF C12 H16 N4 O4



CM 3

CRN 100-42-5

CMF C8 H8



RN 203648-12-8 HCA

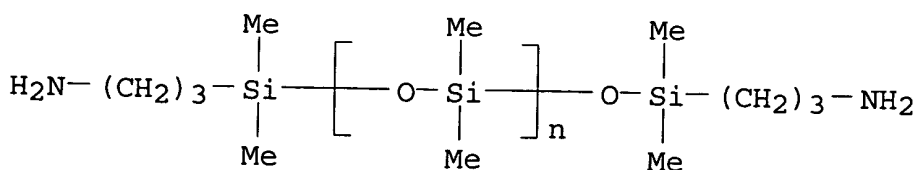
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] and butyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

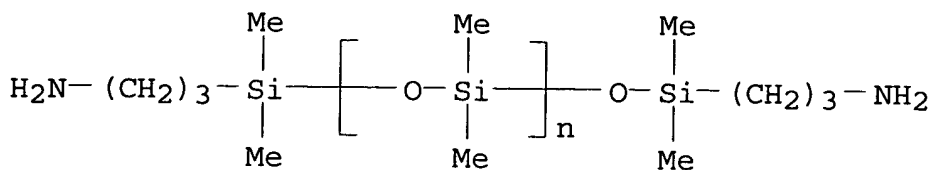
CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

CCI PMS

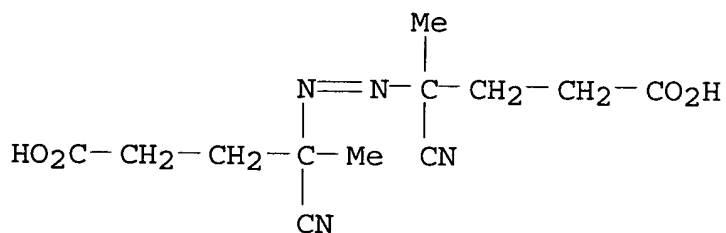




CM 2

CRN 2638-94-0

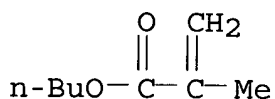
CMF C12 H16 N4 O4



CM 3

CRN 97-88-1

CMF C8 H14 O2



RN 203648-14-0 HCA

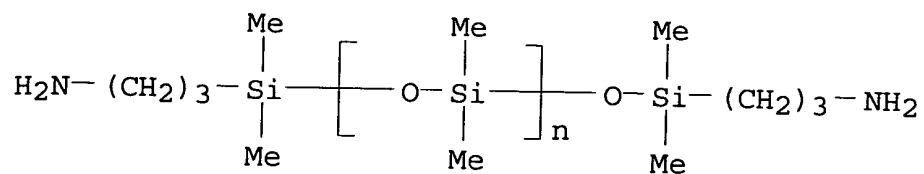
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
.alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], butyl
2-propenoate and methyl 2-methyl-2-propenoate, block (9CI) (CA
INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

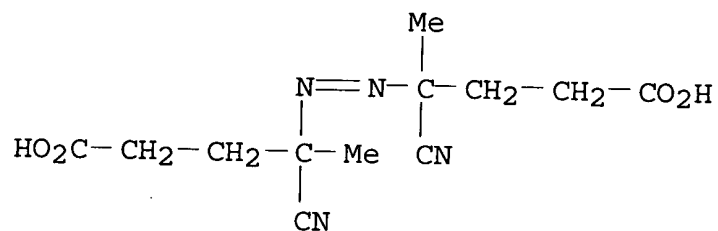
CCI PMS



CM 2

CRN 2638-94-0

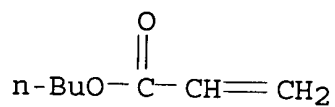
CMF C12 H16 N4 O4



CM 3

CRN 141-32-2

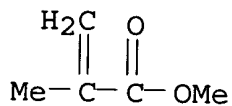
CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



IT 158947-07-0P

(cured materials of unsatd. polyester resin)

RN 158947-07-0 HCA

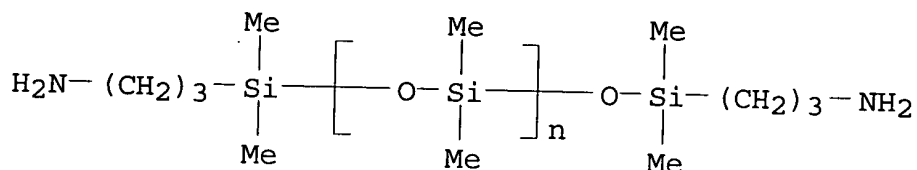
CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with
 .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[3-
 aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA
 INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)_n C10 H28 N2 O Si2

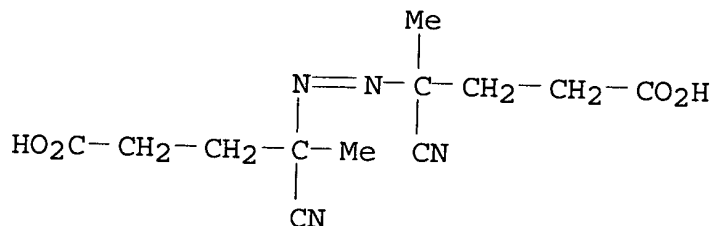
CCI PMS



CM 2

CRN 2638-94-0

CMF C12 H16 N4 O4



IC ICM C08L067-06

ICS C08G077-54; C08F004-40

CC 37-6 (Plastics Manufacture and Processing)

IT 181434-99-1P 203648-07-1P 203648-10-6P

203648-12-8P 203648-14-0P

(cured materials of unsatd. polyester resin)

IT 158947-07-0P

(cured materials of unsatd. polyester resin)

L17 ANSWER 29 OF 41 HCA COPYRIGHT 2003 ACS

124:290655 Manufacture of siloxane block copolymer emulsions. Noguchi, Takeshi; Mise, Tsuyoshi; Watanabe, Minoru; Cho, Ishu (Showa Highpolymer, Japan). Jpn. Kokai Tokkyo Koho JP 08003254 A2 19960109 Heisei, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-157883 19940615.

AB Title emulsions, useful for coatings, additives for paper, fibers,

and films, and showing improved water repellency, weatherability, sliding property, and gas permeation, are prep'd. by dispersing siloxanes bearing $\text{CO}(\text{CH}_2)_k\text{CR}_{12}\text{N}:\text{NCR}_{12}(\text{CH}_2)_k\text{COAZSiR}_{22}(\text{OSiR}_{32})_m\text{OSiR}_{22}\text{Z}$ A [A = O, NH; R₁ = lower alkyl, CN; R₂ = lower alkyl; R₃ = (halo-substituted) alkyl, Ph; Z = $(\text{CH}_2)_n$, $(\text{CH}_2)_3\text{O}(\text{CH}_2)_2$; k = 0-6; m = 0-200; n = 0-6] groups and vinyl monomers in the presence of surfactants in water, and polymg. the resulting emulsions (particle size .ltoreq.0.5 .mu.m). Thus, 200 parts KF 8008 (amino-terminated polydimethylsiloxane) was reacted with 6.34 parts 4,4'-azobis(4-cyclopentanoyl chloride), then 20 parts the resulting azo-contg. siloxane were reacted with Me methacrylate 110, Bu acrylate 62, methacrylic acid 4, 2-hydroxyethyl methacrylate 4 parts in the presence of Emal 2F Needle to give an emulsion, which was cast to give a film showing good water repellency.

IT 158271-34-2P

(macromonomers; manuf. of siloxane block copolymer emulsions)

RN 158271-34-2 HCA

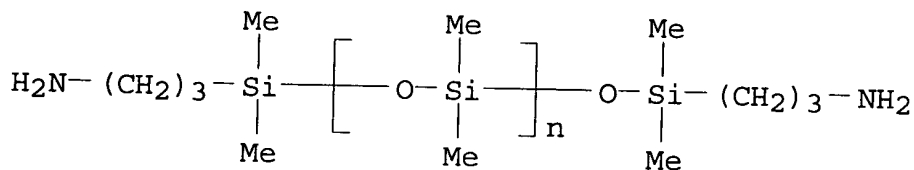
CN Pentanoyl chloride, 4,4'-azobis[4-cyano-, polymer with .alpha.-[(3-aminopropyl)dimethylsilyl]-.omega.-[[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF $(\text{C}_2 \text{H}_6 \text{O Si})_n \text{C}_{10} \text{H}_{28} \text{N}_2 \text{O Si}_2$

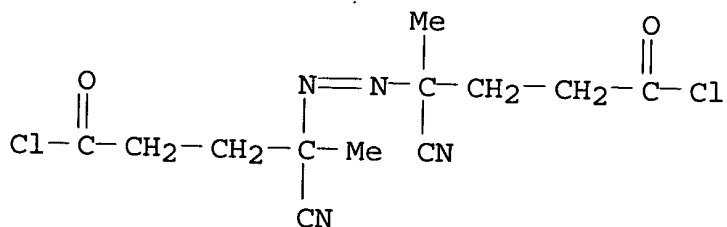
CCI PMS



CM 2

CRN 17170-81-9

CMF $\text{C}_{12} \text{H}_{14} \text{Cl}_2 \text{N}_4 \text{O}_2$



IC ICM C08F293-00
CC 35-8 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 38, 42
IT 158271-34-2P
(macromonomers; manuf. of siloxane block copolymer emulsions)